

# TALES FROM 2040

THE CORPORATE SAVIORS OF HUMANITY



THREE SHORT STORIES FROM A FUTURE MADE BRIGHTER BY:

**FACEBOOK • APPLE • LADY GAGA**

**CHRISTOPHER CARDINAL**

# TALES FROM 2040

THE CORPORATE SAVIORS OF HUMANITY



CHRISTOPHER CARDINAL



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*To my parents,  
thank you for loving this scoundrel*

*I can never repay the kindness you have shown me;  
I can only pay it forward*



## AUTHOR'S NOTE: PAY IT FORWARD

Neither Facebook, nor Apple, nor Lady Gaga asked me to spend seven years writing these books, and the decision to give them away for free was my own. No one owes me anything.

*Tales from 2040* is an experiment. The goal is to build a network of paid professionals who work together to continue providing this unrequested consulting, developing more ways for powerful companies to make solving social problems a profitable part of their business, with donations from the public and each satisfied client funding the next project. This may be a worthwhile endeavor or a foolish daydream, but I trust the market will provide a clear answer.

If you feel this work is socially beneficial and wish to see it continue, please pay it forward by sharing these books with others, or better yet, sharing your own vision of a brighter future with the world. For details, please visit:

<http://2040.net>

There, the 2040 Network is forming to discuss these books and develop new strategies for charitable capitalism. I hope to see you there, and I welcome your questions, comments, criticism, and creative ideas.

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These stories describe numerous actions and statements attributed to real people, but most of these never actually occurred. The real people who appear in these books are used as characters to tell more realistic stories.

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<http://2040.net>

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## THE ALTRUIST'S OPPORTUNITY

Years ago, while working on an advertising campaign for one of my clients, I had the pleasure of speaking with a cardiac surgeon for a few hours. Normally, he would not have had time to talk, but he had recently hurt his hand and was unable to perform surgery until he recovered.

Making conversation, I asked about his injury. He confessed that, while proficient with the tools of his trade, he was clumsy when it came to construction, and he had accidentally smashed his finger with a hammer while building houses in Mexico with Habitat for Humanity.

This seemed absurd to me. I blurted out without thinking: “But you’re a doctor! Why in the world were you doing construction work?”

The surgeon was a dignified man, but I was still a teenager, so he forgave my rudeness. He smiled patiently and explained, “Everyone needs a home, so I help where I can.”

“But everyone needs their health, too. What I mean is... you’re a doctor. If you want to help people, why don’t you use your medical training? Some of the people you help are bound to be carpenters and they can go build the houses.”

“You know, I’ve never really thought about it that way.”

We then discussed several alternatives. If he wanted to help with construction, he could simply donate money to Habitat for Humanity. In fact, he could sponsor an entire house with a week's pay from his job where he already saved lives.<sup>1</sup> If he wanted to help people in Mexico, he could work through Doctors Without Borders to perform valuable procedures in impoverished areas. After a lengthy conversation, it became clear he wanted to serve his local community. Of all the ideas proposed, the one he liked best was to begin hosting free cardiovascular health clinics.

The surgeon gave lifesaving advice to thousands of people each year through these clinics. Plus, they generated new business for his group practice in the form of preventive care. Ultimately, he donated half of his share of this new revenue to Habitat for Humanity, which was worth far more than his previous contributions as an amateur carpenter.

It was a win-win-win situation: Habitat for Humanity, his local community, even the surgeon himself – everyone came out ahead. By sticking to his strengths, the surgeon was able to make a much greater difference in less time than he used to spend awkwardly swinging a hammer.

I'd love to claim that I had an epiphany then, but I just chuckled and filed this experience away as a mildly amusing anecdote about a very smart person who wasn't thinking about what he was doing. It took almost a decade for me to appreciate the story of the surgeon and realize that I was considerably more foolish.

I was only too happy to point out how the surgeon did not think about his charitable behavior, but I had failed to take a good look at my own. Sure, I gave a little time here and a

little money there, but I had never once thought critically about how I could best participate in society. Giving mindlessly like this gave me a false sense of generosity. Meanwhile, the impact I was making was uncomfortably close to doing nothing. Perhaps I couldn't save lives, but I knew I could contribute more than I had in the past.

I started thinking about smarter ways to give, but how I could help was not immediately clear, as I do not have the amazing abilities of the surgeon. In fact, I have only ever had one "real" job: I have worked as a consultant since I was 14.

Now, if you have ever dealt with a consultant, you already know that most of us don't actually *do* anything. Primarily, we identify problems and give advice on how to solve them. Unlike surgeons, consultants rarely get their hands dirty, figuratively or otherwise. We design plans and sometimes manage their execution, but most of the time, the actual work is done by other people.

Ultimately, I followed my own advice to stick to one's strengths. I decided to help through consulting, only now I would try to tackle more important problems than just improving a company's market share. Instead, I would think about how to improve the world around me, starting with my own community. I began forming plans to approach some longstanding social problems from new angles. But who would follow these plans?

Better yet, who could?



## THE AGE OF THE CORPORATION

In America, we typically look to the government to solve social problems. However, in its current state, the US government is incapable of making meaningful change. Congress is so bitterly divided that it cannot pass routine measures, let alone discuss matters of substance. Even if our leaders could agree on what should be done, they would have no way to pay for it.

The American government is bankrupt and deadlocked. Apple Inc., on the other hand, has more cash in the bank than the United States Treasury<sup>2</sup> and can spend it without years of political debate. Who has more power to solve big problems?

Who has more influence with young people? The president? A subcommittee of geriatric senators? Or Lady Gaga?

Who has changed the world more in the last few years? Congress? Or Facebook?

The age of governments is over. Multinational corporations are the new superpowers.

Besides, should we really trust our most important problems to an organization that gets paid whether it does a good job or not? Governments like ours are typically best at straightforward, utilitarian tasks, like providing basic services and preventing catastrophes. But when it comes to innovation and convincing people to change their behavior, corporations are light years ahead. If Apple got into the business of doing good, can you imagine just how good that good would be?

Unfortunately, many people cannot imagine corporations doing good. Google's credo "Don't be evil" illustrates the cynical expectation that a group working to make a profit will inevitably do so at the harm of others. But corporations are not evil. They are made of people who are just like you and me.<sup>3</sup> The most visible of these people, and frequently the only ones we see, are the CEOs, and much of this animosity comes from their enormous salaries.

In 1980, CEOs typically made about 40 times as much as one of their employees.<sup>4</sup> Later, the SEC required that executive pay be made public as part of an effort to rein in these rapidly growing salaries, but if anything, it had the opposite effect. When CEOs learned what their counterparts at other companies were making, they started asking for even more money. By 2008, the ratio of chief executive-to-employee pay was over 300-to-1 and CEO salaries kept rising, reaching new highs yet again in 2011.<sup>5</sup>

This makes some of us conclude that corporations are run by shameless monsters whose greed knows no bounds. We think their fame and wealth have made them lose touch with what it means to be a normal person. But looking at this another way, it shows that CEOs are exactly like the rest of us and are still capable of feeling a basic human emotion: jealousy. Billionaires envy multi-billionaires just like the rest of us envy people with a nicer car or house.<sup>6</sup> CEOs want to be competitive among their peers, just like you and I do.

Besides, wealth is relative. Compared to billions of people worldwide who live in poverty, most of us in America are rich and enjoy lives of extreme privilege. The average CEO now makes about 300 times more than an employee. The average American, though, makes about 300 times more

than the average person in the Democratic Republic of Congo.<sup>7</sup> Does making 300 times more than someone else make us average Americans so happy that we don't want more? No, and it doesn't make us stop wanting to do good, either.

We think of ourselves as good people who enjoy helping others. But just as some of us cannot imagine the rich and powerful being generous like us, we cannot imagine ourselves being evil. Cruelty, unfortunately, is also part of human nature, and given the right situation, we are all capable of it.

In the infamous Stanford Prison Experiment of 1971, a group of normal college students were asked to assume the roles of guards and inmates in a mock prison. The participants were chosen from a larger pool for being the most mentally stable and the least anti-social, yet almost immediately, the "guards" became sadistic, taking delight in abusing their classmates, depriving them of sleep, stripping them naked, and humiliating them by forcing them to simulate sodomizing each other. The project had to be terminated in less than a week because it had gotten so out of control.<sup>8</sup> Decades later, the professor who designed this experiment was called to testify to explain why otherwise normal soldiers committed unspeakable acts of torture and degradation against the prisoners at Abu Gharib.<sup>9</sup>

We swear that if we had as much money as these high-flying CEOs we would be satisfied, but chances are that we are wrong. Unless it means the difference between living in poverty or not, money does not necessarily buy happiness.<sup>10</sup> We also swear that we would never torture another human being, but most of us should be thankful

that we will never be in a position to find out if we are wrong about that, too.

Feeling jealous, being selfish, even torturing people, all of these are examples of normal human behavior, depending on the situation.<sup>11</sup> However, so are generous actions like donating to charity or helping a stranger. Within each of us lurks the potential for evil, but at the same time, a great potential for good as well.

Each day we find ourselves in situations in which we must choose between helping others and helping ourselves. Most of us choose to act in our own self-interest most of the time, but not always. Sometimes we choose to act altruistically, helping others at our own expense. What types of situations lead us to do this?

## THE PRISONER'S DILEMMA

Imagine that you are a criminal, and that you and an accomplice were arrested while shoplifting. The police also suspect you both of murder, but they do not have enough evidence to charge either of you unless one testifies against the other. They separate you and give you both two options: Testify against your partner or remain silent.

If you both remain silent, you will both be charged with the lesser crime and sentenced to one month in jail. If you testify but your accomplice remains silent, the shoplifting charges will be dropped and you will go free, while your accomplice will be imprisoned for 30 years. The reverse is true as well: If you remain silent but he testifies, you will face a 30-year prison sentence and he will go free. If you both testify against each other, you will both go to prison for 25 years. The four possible outcomes can be seen here:

Illustration: The advantages of selfishness

	If you testify... <i>(selfish choice)</i>	If you are silent... <i>(altruistic choice)</i>
...and your partner is silent	<b>You go free</b> <i>(Partner: 30 years)</i>	<b>1 month in jail</b> <i>(Partner gets same)</i>
...and your partner testifies	<b>25 years in prison</b> <i>(Partner gets same)</i>	<b>30 years in prison</b> <i>(Partner goes free)</i>

From the illustration above you can see how, no matter what your partner chooses, you are always better off if you

testify (at the expense of your partner), making it the selfish choice. Conversely, you are always worse off if you remain silent, which makes it the altruistic choice since you would help another without benefiting yourself.

Those who trust their partners implicitly might choose to remain silent, even though it would cost them. But when two people act out of pure self-interest, rather than cooperating and getting a light sentence, they both act selfishly and end up with a stiff penalty.

The outlook gets even darker when more people are involved. Imagine the same situation, except with ten accomplices.<sup>12</sup> The chances of everyone cooperating are so slim that acting altruistically seems pointless.<sup>13</sup>

This classic scenario, called the Prisoner's Dilemma,<sup>14</sup> appears frequently in game theory, a form of applied mathematics used in fields such as economics, biology, and psychology to explain and predict the decisions of individuals. Social scientists use the Prisoner's Dilemma to illustrate why people may act selfishly even when they would be better off as a group if they cooperated.

Throughout the course of our lives, we often make choices as if we were in the Prisoner's Dilemma, looking out only for ourselves and feeling justified for doing so. However, there are serious problems with acting this way, since reality rarely resembles the Dilemma. In the Prisoner's Dilemma, the only rational choice is to be selfish,<sup>15</sup> but in reality, we do not always take the most cold-hearted, calculated choice to maximize our gain.<sup>16</sup> We vote, even though we know our effort will likely make no difference. We tip at restaurants, even when we never expect to return. Sometimes, we help strangers we won't ever see again.<sup>17</sup>

Illustration: The Prisoner's Dilemma vs. reality

**In the  
Prisoner's Dilemma...**

*...we are criminals gambling  
with our freedom.*

*...we have no conscience and  
only care about ourselves.*

*...there are only two black-  
and-white choices.*

*...we assume that people will  
act strictly rationally and  
make selfish choices.*

*...everyone must cooperate  
for the group to benefit.*

*...we make our choices in a  
vacuum.*

**But in reality...**

*...most of us are just normal  
people choosing how to  
spend our time and money.*

*...we care about others and  
want to avoid harming  
them.*

*...there are many shades of  
gray between acting purely  
selfishly and altruistically.*

*...we know that sometimes  
people choose to be  
generous.*

*...a few can make everyone  
benefit, even if others choose  
to be selfish.*

*...our choices affect the  
behavior of others, and their  
choices affect our own.*

In fact, one of the only true parallels between reality and the Prisoner's Dilemma is that everyone would be better off if we were all more generous. In order to study conditions that more accurately mirror our own lives, consider another scenario, a counterpoint to the Prisoner's Dilemma that I call the Altruist's Opportunity.<sup>18</sup>

## THE ALTRUIST'S OPPORTUNITY

Imagine you are in a room with nine strangers and a limitless bag of money. Each of you has one opportunity to take some money from the bag. You can either keep money for yourself or add it to a pot that will be split evenly between the ten of you after everyone has had a turn. You cannot talk to each other and you must keep your eyes closed until the end. You have three options:

**A**

**Give nothing**

Take \$100 and keep it all yourself.

**B**

**Give a little**

Take \$90 for yourself and \$5 for the pot.

**C**

**Give a lot**

Take \$500 and put it all in the pot.

Which option would you choose?

Obviously, everyone will be better off if everyone gives a lot. However, since there is no way to know how anyone else will act, many would give nothing, while the more generous might give a little. As a result, most of us would be surprised to find more than \$15 in the pot.

This is not to say we are all doomed to be selfish. In fact, if we change the situation just a little, most of us would act more charitably. If people were allowed to speak to each other, for example, everyone could promise to give a lot, and many would honor that promise. Alternatively, if the room were filled with our closest friends or victims of a natural disaster, many would choose to be more generous. However, in reality, situations like this are rare. Usually we cannot form complex agreements with casual strangers or limit the effects of our choices to only our loved ones.

What we can do, though, is open our eyes.



Imagine that everyone makes his or her choice publicly instead of in secret. Furthermore, imagine you are last in line, and everyone else has given nothing, leaving the pot empty. The room is full of disappointed sighs and glaring. No one else gave anything; why should you?

Now imagine that you are sixth in line, and the five strangers before you have each chosen to put \$5 in the pot. Even though it costs you a small amount, wouldn't you feel compelled to give a little as well?<sup>19</sup>

What if you were third in line, and the two people before you took a risk and put the maximum amount in the pot for everyone to share? Even if no one after you gives anything, you will still end up with more than if everyone had been selfish.<sup>20</sup> Nine pairs of hopeful eyes are on you, waiting for your decision. Can you now easily picture yourself choosing to give generously?

Some of us would cooperate happily to show appreciation for those who went before us. Others might do it out of pride, shame, or a sense of obligation. On the other hand, even the greediest of us can see how it would pay off to keep the trend of kindness going rather than halt it with a selfish act. Regardless of the reason, many of us will take a risk and give generously when we observe others doing the same. The Altruist's Opportunity shows how, given the same options, people will give nothing, give a little, or give a lot, depending on what others choose to do.<sup>21</sup>

## OF SAINTS AND SCOUNDRELS... AND SURGEONS

However, not all people change their behavior according to the actions of others. A very special few always choose to give a lot, no matter how many times they have been burned by selfish strangers. Let us call these people “saints.” On the other hand, some always choose to give nothing regardless of how well others treat them. Let us call them “scoundrels.”

Any given room of ten may have a scoundrel or two in it, and although they are rare, if you are very lucky a saint will be there. However most, if not all of the people in the room are usually like me. Far from being consistently generous or selfish, I can think of times when I have given nothing, given a little, or given a lot, depending on the circumstances. I am definitely no saint, although I know I am not a scoundrel, either. I am somewhere between these two extremes, and chances are good that you are too.

If we are neither saints nor scoundrels, what are we?

The rest of us are surgeons, even if we don't know it. Just like the doctor at the beginning of the book, we all have special talents, although sometimes we need to be hit with a hammer to realize what they are or how we can use them to contribute to society. When we don't give of our best talents, we only give a little. Just as in the Altruist's Opportunity, giving a little is inefficient and doesn't make a big difference, but since it makes us feel charitable and doesn't cost much, we do it anyway – sometimes for a lifetime without question. It is crucial that we find out what we are best at giving and give generously, because no

matter what we do, our behavior has a profound effect on those around us.

We walk through dozens of these theoretical rooms every day, each one filled with the people whose lives we touch. One group might be our immediate family; another might be our coworkers; another might be the six strangers on the corner waiting for the signal to change. We cannot always control who is in each room when the Altruist's Opportunity arises, but where we are in line depends entirely on our perspective.

In our darkest hours, we may feel like we are last in line in a room full of scoundrels. However, rest assured that the situation looks very different to others. Somewhere else, a saint has just given everything she could, and to the onlookers, we are second in line. Our choice will determine whether altruism looks like a good trend to follow or a sucker's bet. Every opportunity we have to give is also an opportunity to inspire others to follow suit. When we give, we must give our best so that when we inspire others, we inspire them not just to give, but to give a lot.

## OPPORTUNITIES SURROUND US

Giving a lot does not necessarily require giving away massive amounts of time or money. Our contributions are measured better by the differences we make, not the size of our sacrifices. To give the most, we need to use our best talents purposefully to enrich society.

One young student I know has little time or money to give, but she gets along very well with animals. This quality alone might not seem particularly valuable, but it is how she uses it that is remarkable. She spends a few hours each Saturday at a local animal shelter playing with dozens of dogs. As any veterinarian can tell you, without frequent socializing, animals become withdrawn and unfriendly, which limits their chances of adoption. If the situation persists, the animals may be deemed a lost cause and euthanized. By simply playing with dogs, an activity she thoroughly enjoys, she is literally saving their lives.

Opportunities to improve the world are all around us, but they are not always obvious. Regular folks like me, who are neither rock stars nor captains of industry, need to think carefully about our own strengths to recognize these opportunities. But we can't stop there.

Even a brilliant doctor did not see how he could best contribute, and I remained clueless for years before a friend pointed out I was guilty of the same mistake. It often takes an outside perspective to see how we can give our best, so we need to think about others, and if we see new ways for them to use their unique skills, we need to speak up and share our ideas.

There is no reason to limit this kind of thinking to just our friends and families. Celebrities and CEOs of successful companies have talents that are well-known to all of us. And despite appearing larger than life, most of these distinguished few welcome ideas for how they can help others. Many feel a moral duty to give back, as they have received rewards that are disproportionate to their contributions to society. As legendary investor and philanthropist Warren Buffett recently said, our economy:

*...rewards someone who saves the lives of others on a battlefield with a medal, rewards a great teacher with thank-you notes from parents, but rewards those who can detect the mispricing of securities with sums reaching into the billions.<sup>22</sup>*

Fame and fortune give these superstars more opportunities to contribute than most. Many are generous with their personal wealth; some even give away billions. However, the businesses they run – the ones that do hundreds of billions’ worth of business each year – remain selfish and cutthroat. Imagine if they made doing good a normal part of this business; the ongoing impact would be even greater than giving away their fortunes.

Living in the spotlight makes these individuals highly influential and central to the development of trends. The rest of the world notices their every move and uses their behavior as a model.<sup>23</sup> If a few of these leaders change the way they do business to have a more positive effect on society – and remain just as successful – the ripples they create could grow into worldwide waves of charitable capitalism.

## CHARITABLE CAPITALISM

The luminaries of today wield unprecedented power, and the idea that they could use it to become the saviors of the human race is nothing new. In fact, it's the exact premise of *Only the Super-Rich Can Save Us!*, an idealistic novel by Ralph Nader in which 17 wealthy individuals form a secret society to fight corporate villains and solve social problems.<sup>24</sup>

Fantasy aside, a select few have actually devoted their considerable power to doing good. People like Bill Gates and Bono, business leaders and entertainers who have used their success as a platform to pursue humanitarian causes, have made profoundly positive changes in the world, making headway against serious problems like hunger and disease in poverty-stricken nations. In *Philanthrocapitalism*, authors Matthew Bishop and Michael Green highlight what sets these two apart from regular philanthropists. Gates and Bono participate heavily in their giving, donating not just their money, but also their business acumen, gravitas, and fundraising skills to maximize their impact to a cause.<sup>25</sup>

However, just like almost every rich person who becomes a philanthropist, they gained power and wealth through one business in which they truly excelled, then donated their time and money to completely different charitable ventures.<sup>26</sup> It is wonderful that they have chosen to do this, but what if instead of using capitalism to make money to fund charitable projects, powerful corporations and individuals made doing good a part of their capitalist ventures?

## CAPITALISM

The primary goal of capitalism is making money. Pure capitalists look at a situation and ask:

*How can we make the most profit?*

## CHARITY

On the other hand, the primary goal of charity is helping others. Pure charities look at a situation and ask:

*How can we do the most good?*

Each of these single-minded approaches comes with its own drawbacks. Capitalism cares little about doing good, or, for that matter, doing evil. The blind pursuit of profit can justify nearly any action, even those that harm others.

The drawbacks of charity are more subtle, and stem from the fact that most charities rely on donations. They are not self-sustaining, and with no expectation of profitability, charities can become incredibly inefficient. Non-profits have become notorious for spending more on fundraising than they do on the causes they are supposed to support,<sup>27</sup> waste that would never be tolerated by capitalism. Many do a great job and serve a vital purpose, but those that are not managed well can actually do harm, even those that are not outright fraudulent. By operating under the idea that even a small positive change is good, charities neglect to account

for the opportunity cost of the time, money, and effort spent to make that change – resources that could have done more good elsewhere.

It can be difficult to tell how efficient a charity is. On the other hand, it is obvious to see who knows how to practice capitalism. The best dominate earnings reports and the worst go out of business. Many non-profits would do well to operate more like for-profit corporations, and this is a growing trend.<sup>28</sup> But capitalism could learn a thing or two from charity, too.

Corporations cannot abandon capitalism; profitability is the lifeblood of business. However, while most charities likewise cannot make a profit, today's corporations have unprecedented power to do good.

## **CHARITABLE CAPITALISM**

Successful capitalists can make the world a better place by acting like the surgeon: sticking to what they are best at doing and then making doing good a normal part of doing business.

Charitable capitalists look at a situation and ask:

***How can we do the most good?***  
***How can we make the most profit doing that?***

This approach is not just for idealistic startups. It is far more important for established companies to examine the resources they have acquired through pure capitalism and determine how they could be used to benefit society.



## WHY DO GOOD?

For individuals, doing the right thing is reason enough. Corporations, though, have a responsibility to their shareholders to maximize profit. Fortunately, doing good is great for business.

Charitable capitalism can help in every department:

### **SALES**

The charitable component of a business can differentiate its products, giving customers another reason to buy.

### **CUSTOMER SERVICE**

When interacting with an organization that does good, customers complain less and are more understanding.

### **PUBLIC RELATIONS**

Charity adds a new dimension that gives the media more reason to cover a company and portray it favorably.

### **HUMAN RESOURCES**

Working for a good cause improves morale and can help attract and retain more talented, passionate employees.

### **FINANCE**

Goodwill can be a company's greatest intangible asset and can buoy its stock price and long-term outlook.

### **LEGAL**

A positive public image can result in more lenient regulation as well as less frequent lawsuits.

There's a catch, though: To get these benefits, corporations must make doing good a permanent part of their brand, an inseparable idea that comes to mind any time someone thinks about the company or its products. This requires going beyond traditional cause marketing.

Suppose Apple took 2 percent of the profit from each *iPad* sold during a back-to-school promotion and donated it to a literacy program. A good cause would receive a substantial amount of money, and Apple might even sell a few more tablets, but it would not change the way we think about the company.

On the other hand, imagine if Apple had its legendary design team create a free *iOS* application that improved the way elections are conducted. The company would be known worldwide as a champion of freedom and the *iPad* would become a tool of democracy.

A few states have introduced new legal entities like the benefit corporation and the low-profit limited liability company to make it easier for businesses to further social causes, but these are relatively recent inventions.<sup>29</sup> Some companies, though, have already shown that making a profit and doing good do not have to be mutually exclusive.

Toms Shoes is one such company. It was founded on the premise that for each pair of shoes sold, it would donate another pair of shoes to a child in an impoverished area.<sup>30</sup> Practicing charitable capitalism let Toms differentiate its brand in a market crowded with literally thousands of competitors.<sup>31</sup> This helped it grow during a recession to sell over a million pairs of shoes and donate a million more in just four years, and Toms has also inspired a wave of entrepreneurs to emulate its business model.<sup>32</sup>

A company does not have to be based on a charitable idea to practice charitable capitalism, though. In fact, large, successful companies are in an even stronger position to help others. The same resources multinational corporations use as weapons against their competitors – their cash reserves, their market share, their brand loyalty, their legions of talented employees – these can all be used as tools for solving social problems.

## BILL GATES

People rarely get very far in capitalism by being saints. Yet most CEOs are not scoundrels, either. Most are surgeons, ones who operate in a board room rather than an emergency room. Their practiced hands maneuver marketing strategies and financial models with the same confidence and finesse as a surgeon's scalpel, and the results can be similarly miraculous.

Consider, for example, one of the greatest CEOs of the modern age: Bill Gates. At Microsoft, his skill at recognizing good ideas and making them profitable was the envy of the business world. If anyone could figure out how to make doing good profitable, it would be him, because his ability to make money is mind-boggling.

By leading Microsoft to grow from a partnership with a handful of employees into the most valuable company the world has ever seen,<sup>33</sup> Gates became the first person to amass a net worth over \$100 billion.<sup>34</sup> Yet he bowed out at the peak of his career. Two weeks after Microsoft set the record for the highest market capitalization ever reached by a public company,<sup>35</sup> Gates stepped down as CEO.<sup>36</sup> Later

that year, he and his wife founded the Bill & Melinda Gates Foundation, which, primarily through his own donations, has become the largest charitable organization in history,<sup>37</sup> spending over \$26 billion to fight disease and poverty in developing countries and improve education in America.<sup>38</sup>

However, Gates did not have to leave Microsoft to do good. While his decision to do so was admirable, could he have done even more good if he had stayed?

For a moment, please forgive my audacity at questioning the decisions of a man who is widely regarded as the greatest philanthropist in history, who has given away three times more money than anyone else has,<sup>39</sup> whose efforts have helped eradicate polio in India,<sup>40</sup> save millions of lives,<sup>41</sup> and inspire over 80 other superwealthy Americans to donate most of their fortunes,<sup>42</sup> and who has earned more money and done more good in a week than I will in my entire life.

But as a consultant and a perfectionist, I cannot look at anything, no matter how great it is, without thinking about ways in which it could be improved. And solving the problems the world faces today requires us to think bigger than anything that has ever been done before. Besides, if the man who gave the most could have given more, then who among us couldn't stand to improve as well?

It all comes down to one of the most basic economic concepts: opportunity cost. After all, Gates' decision to leave Microsoft did not come without a cost to the world. By contrast, Gates' longtime rival Steve Jobs was infamously stingy, giving nothing to charity.<sup>43</sup> Yet what if Jobs had stepped down as Apple's CEO at the same time Gates relinquished his own position, over a year before the

*iPod* was released? Would we still have the *iPhone* and the *iPad*? Has humanity not benefited from these inventions?

The *iPhone* combines the functions of literally hundreds of different devices and connects people with vital information. The *iPad* is revolutionizing education in ways we will not fully realize for years to come. Beyond convenience and entertainment, the collective value of the efficiencies gained, the jobs created, and the paper, power, and time saved as a result of these devices is incalculable.

Author Malcolm Gladwell predicted that in 50 years, no one will remember Steve Jobs, while there will be statues of Bill Gates, and he may be right.<sup>44</sup> By the same token, Gates was a driving force of innovation at Microsoft, and we will never know what the world would look like if he had stayed.

Not to downplay the impact of his direct involvement with his charitable endeavors, but based on his track record and his ability to multitask and delegate, it is likely that the work of the Bill & Melinda Gates Foundation and The Giving Pledge could still have been accomplished even if he had remained the CEO of Microsoft. Gates can, of course, rest easy with the superhuman amount of good he has done, and hardly needs anyone's advice on how to make the world a better place. But these books are not for Bill Gates, whose decision to pursue philanthropy at the height of his career was a rare and wonderful anomaly. These books are for the other 99.99 percent of us who would not walk away from a multi-billion dollar company to do charity work in developing countries.

Fortunately, people don't have to quit their jobs to make the world a better place. In fact, most CEOs could help more by staying right where they are.

Imagine if Gates, a person who is obviously interested in helping others, had used his giant brain to figure out how he could best use the most powerful tool at his disposal – Microsoft Corporation – in his quest to solve the difficult problems of the world. Gates was the richest person in the world for well over a decade, and still would be today if he had not given a third of his money to charity.<sup>45</sup> However, even his vast personal fortune paled by comparison to the value of Microsoft. Before Gates stepped down, he held an almost inconceivable amount of influence as the head of the world's largest company. Imagine if, instead of leaving, Gates had practiced a form of charitable capitalism and made doing good a part of the core business of Microsoft.

Here's just one possibility: What if Gates had changed the software billions of people use every day to include features that encouraged them to be more charitable? The total impact could have been larger than anything anyone has ever done, and he still could have donated his fortune.

Consider the following example: The Arecibo Observatory in Puerto Rico houses the world's largest radio telescope, which records massive amounts of data about deep space. For years, scientists had wanted to analyze this data to search for signs of extraterrestrial life, but lacked the computational power to do so. To that end, programmers at the University of California, Berkeley developed *SETI@home*, an application individuals could download for free to help. The software consisted of two components: One that would periodically download data from a secure server, and another that would process that data in the

background when the computer was idle, then upload the results. Within a week of its release in 1999, almost 300,000 computers had contributed 1,100 years of computing time to the effort.<sup>46</sup> When it celebrated its tenth anniversary in 2009, *SETI@home* had not yet found any extraterrestrial life, but was still the largest and longest-running volunteer computing project.<sup>47</sup>

That same year, Microsoft released a program called Microsoft Security Essentials (MSE), which quickly became the most popular antivirus software in the world.<sup>48</sup> MSE owes its popularity in part to good reviews,<sup>49</sup> and in part to the fact that anyone with a valid copy of Windows can download and install it for free. The program includes two components that should sound familiar: One that periodically downloads data from a secure server and another that processes data in the background, just like *SETI@home*.<sup>50</sup>

Microsoft could easily make this software perform two functions: When it is not scanning for viruses, it could be processing data for scientific research. The installation process could explain this extra feature and allow users to decide how much of their idle processing time, if any, they want to donate and which causes they want it to support.

Furthermore, instead of preventing users with pirated copies of Windows from using MSE, Microsoft could give it to them for free as well, provided they donate some minimum portion of processing time. This would probably have no measurable effect on sales. Those who are comfortable stealing software are unlikely to purchase a valid copy of Windows just to get MSE, especially when similar antivirus programs cost far less than a Windows license fee. Plus, getting more people to use antivirus

software would benefit society. Microsoft has noted that systems with pirated copies of Windows tend to have higher rates of malware,<sup>51</sup> which is a problem that affects everyone, since infected computers can be used to attack other systems. Malware has cost the global economy upwards of \$100 billion in the last decade,<sup>52</sup> and with the worldwide software piracy rate at about 42 percent, there are hundreds of millions of computers that MSE could be making more secure.<sup>53</sup> Despite not directly increasing revenue, Microsoft would still profit from this. Making all Windows installations safer, whether pirated or not, would improve the product's brand image as a secure operating system, which would help the company retain its near-monopolistic market share.

This is to say nothing of the biggest benefit of all: Creating an unbelievably massive supercomputer dedicated to scientific research. *SETI@home* is still the largest volunteer computing network with less than a quarter million systems.<sup>54</sup> By contrast, over 90 percent of the personal computers in the world today run on Microsoft Windows – that's over a billion machines that could potentially join.<sup>55</sup> Plus, grid computing can be used for more pressing problems than finding aliens. For example, a few years after releasing *SETI@home*, Berkeley expanded the program by creating an open-source volunteer-computing platform which allowed similar programs to be developed for other purposes, like studying global climate data and analyzing proteins for medical research.<sup>56</sup> Scientists theorize there are secrets to curing diseases just waiting to be discovered in stockpiles of data that have yet to be analyzed. If this supercomputer had been running for a few years already, would we already have found a cure for muscular dystrophy? Or a universal AIDS vaccine?<sup>57</sup>



Building a way to do good right into the software would give customers a reason to feel great about using Windows, which is especially important when competing against Apple, whose zealous fans have made its own brand the most valuable and most loved ever.<sup>58</sup> Which product would you be more proud to be seen using: The one that shows you like sleek and trendy design, or the one that shows you are helping to cure diseases just by using it?

All of these benefits, at essentially no additional cost to anyone,<sup>59</sup> if someone in power were to stop and think: “How can we use what we are already doing to help people?” This is just one example, a minor change to an existing product that took about five minutes of thought. Gates could have come up with hundreds of better ideas. And if he had, the total impact could have been thousands of times greater than all the good he has done, because his influence in the business world was far more valuable than all the money he has donated.

Wall Street’s obsession with quarterly earnings favors short-term revenue over long-term stability and growth, which leads companies to base all decisions on how they would affect its stock price, even when doing so is not in their shareholders’ best interests.<sup>60</sup> Many executives want to do good but would never risk it, for fear that any action that is not ruthlessly selfish will be interpreted as deviating from their responsibility to maximize shareholder value.<sup>61</sup> Instead, they act as if they were in the Prisoner’s Dilemma: They choose to take a minor gain with no regard to the major harm it causes, and in the end, everybody loses.

Some CEOs, however, are bigger than their boards. These rarefied few can operate nearly unilaterally without facing removal or backlash from shareholders. This is why the

world needs people as generous as Bill Gates to remain CEOs. Considering how many people look to him as the model of success and try to emulate Microsoft's business practices, had Gates stayed and practiced charitable capitalism, it might already be a social norm for companies to include doing good in their business strategies.

However, as stated earlier, many people cannot imagine corporations doing anything but evil, let alone good. That is why, to help visualize what the world might look like in 30 years if a few leaders of today acted a little more generously, I have written a few short stories in a style I call "bright futurism."

## BRIGHT FUTURISM

Futurism (or "futuresology") is an attempt to predict the future through a combination of imagination, intuition, and scientific research.<sup>62</sup> Most of the best-known futurism comes in the form of dystopian fiction, which I call "dark futurism." These cautionary tales warn us of the error of our ways by showing us the dismal future that awaits us if current trends continue to their logical extremes. Classic examples include Ray Bradbury's *Fahrenheit 451* and George Orwell's *Nineteen Eighty-Four*, and the genre continues to be popular today with books like Suzanne Collins' recent bestseller *The Hunger Games*.

What I call "bright futurism," on the other hand, is more closely related to dystopian fiction's cheerful cousin, utopian fiction. These stories typically describe some theoretical alternate reality in which society's problems have been solved, but there are comparatively few popular

examples.<sup>63</sup> For instance, Aldous Huxley's utopian *Island* is completely overshadowed by his dark masterpiece *Brave New World*. Although some pieces of utopian literature have been more popular in the past,<sup>64</sup> the most widely known example today is probably Plato's *Republic*, written some 2,400 years ago. While I hesitate to mention *Tales from 2040* in the same breath as any of the great books listed above, the stories I have written differ from most other fictional accounts of the future in two important ways.

First, most futurism promotes a specific political ideology. Dozens of books throughout the last century describe a utopian future achieved by embracing Marxist ideals. The aforementioned *Only the Super-Rich Can Save Us!* by Ralph Nader is a liberal fantasy of epic proportions in which a small group of idealists abandon the capitalism that made them successful and go on to outwit, humiliate, and defeat powerful conservatives at every turn. On the other hand, in Ayn Rand's *Atlas Shrugged*, a favorite among outspoken conservatives and perhaps the most well-known book that celebrates capitalists, liberals are the enemy and altruism is responsible for ruining the world.<sup>65</sup>

The books in the *Tales from 2040* series, though, contain a broad mix of values, some liberal, some conservative, and some a little harder to classify. Granted, these books are all about capitalism, but most old arguments against that are moot: Capitalism won, and most of the developed world now runs on it. These books also focus on America, but there are objective reasons for this that go beyond any sense of nationalistic pride.<sup>66</sup> Despite recent economic troubles, the United States is still home to the highest concentration of wealthy, influential, innovative, and

generous people in the world.<sup>67</sup> Roughly two-thirds of those who have donated \$1 billion or more to charity are self-made, American entrepreneurs.<sup>68</sup> If charitable capitalism is going to happen, it will most likely start here.

Each story nevertheless discusses highly controversial issues about which many people have opposing, intractable views. The story about Lady Gaga touches on topics including abortion, birth control, homosexuality, and religion, to name a few. While, like anyone else, I have my own opinions about these issues, I have attempted to assume the role of an impartial journalist from the future who documents a past that balances modern American conservatism and liberalism as well as leading perspectives from other Western countries.<sup>69</sup> My aim is not to further any particular political agenda, but rather to promote universal values, like improving health or reducing crime. Each detail about how this comes about is not meant to represent what I believe should happen according to some sense of right and wrong, but rather what is likely to happen according to research, which leads to the second difference between these books and others, which is their relative degrees of realism.

Both bright and dark futurism often describe the end of the world as we know it, some form of heaven or hell on Earth, but these books are much less dramatic. These stories are not utopian, nor are they set in some distant paradise. In fact, the world they describe is not that different from the one we live in today. When the flying cars predicted in the 1950s did not show up in the 1980s, we saw how the major aspects of life changed less in 30 years than we thought they would, yet thousands of small details changed more than we ever dreamed.

Each *Tales from 2040* book is a hyper-realistic painting of a future that could actually happen. Each story begins with a powerful person taking a relatively small action, something we can easily imagine he or she would actually do, which then leads to a chain of similarly believable effects. What makes them different from most other books that speculate about the future is how small of an action is required to set change in motion. In order to make these stories as realistic as possible, they are executed in a manner that is somewhat similar to fan fiction.

In fan fiction, amateur writers borrow the world of a book or television show to tell stories starring the characters they have grown to love. In general, they share these stories with other fans, expressing what they wish would happen in this fictional universe. While some of the oldest Arthurian legends could be considered fan fiction,<sup>70</sup> this literary style was popularized in the 1960s by *Star Trek* fans trading thousands of “episodes” they wrote themselves to augment the relative few that actually aired. This type of writing has recently surged as the internet has made it much easier for such enthusiasts to find each other. For example, on one website alone, fans of the *Harry Potter* series have shared nearly half a million stories set in the magical world created by author J. K. Rowling.<sup>71</sup>

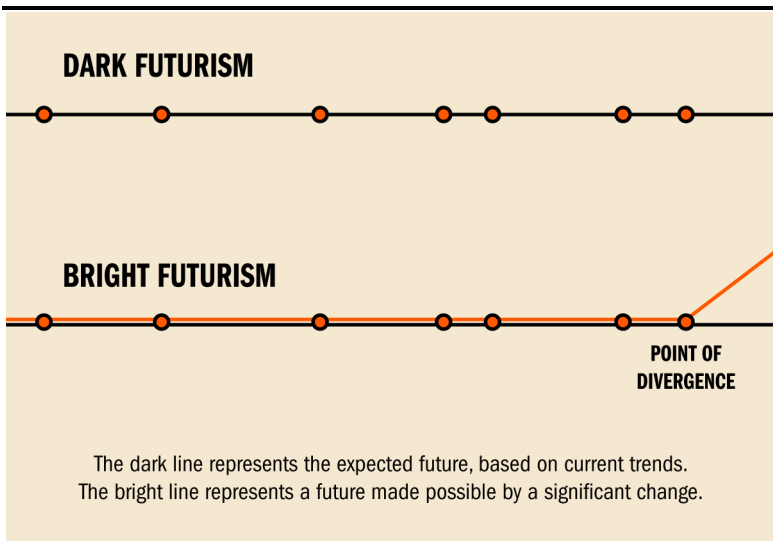
To an extent, this is what I have done, in that I have written books that star characters whom I did not invent doing what I wish they would do. When I daydream, though, I do not think about worlds with teenage wizards or epic battles between spaceships. I think about this world. Rather than idolizing fictional characters, I am a fan of real, successful corporations and talented individuals.

Like Mark Zuckerberg, who connects more people every month than the population of any continent except Asia.<sup>72</sup> Or Tim Cook, who runs a company that is worth more than what nine out of ten entire countries make in a year.<sup>73</sup> Or Lady Gaga, who can start a global trend with a single tweet.

Forget comic book superheroes. These are real people with superhuman powers that affect the entire world, and I like to think about what would realistically happen if they used these powers just a little more generously.

Dark futurism shows how bad the world *will* be in the future if we do not change. My brand of bright futurism, on the other hand, shows how good the world *could* be if we make just one small change today.

Illustration: Dark futurism vs. Bright futurism



These stories are essentially an alternate history of the future, and are therefore a mixture of fact and fiction. Each story begins with recent history as it actually occurred. Then, on a significant date, the story breaks from reality. With a few exceptions, events occurring before this date are real, while everything after that is imagined. These stories are full of real people doing and saying fictional things, so if you are ever uncertain what is real, please check the endnotes.

Although these stories tell of a brighter future, they are not the idle musings of a starry-eyed optimist. In fact, their plots are guided more by research than by my own imagination.

While writing, I constantly turned to research to determine what would happen next. When I came up with an idea, I did not stop when I found research that backed it up – it is far too easy to find research to support almost anything<sup>74</sup> – rather, I looked first for credible research that suggested my idea was wrong. Very often I found it, and each time, I went back to the drawing board to come up with new ideas until I could fit the story to the research, not the other way around. (Unfortunately, even career scientists tend to seek only information that supports their beliefs,<sup>75</sup> even though if they really wanted to find the truth, they would try to disprove their own theories instead.)<sup>76</sup>

Sometimes I would have to repeat this process eight or nine times as the research guided the story through twists and turns I could never have predicted. This slowed the writing process to a crawl, but I believe the end result is a plausible account of how we could look back at 2012 not as the year the world ended, but as a time of great new beginnings and large strides in social progress.

To those who still find these stories farfetched or naïve, I apologize, but these books are not for you. I have written these stories for fellow fans of this world. For those who do not view capitalists as evil, but rather as regular people who are essentially good and who will, in the right circumstances, act kindly and generously. For those who look at the world around us and believe that not only can we do better, but also that we are not far off from greatness.

In my wildest dreams, these stories would come true. More realistically, I hope that sharing my work will encourage others to do the same. Surely, there are hordes of people with better ideas, so if any success comes of sharing mine in this manner, others may decide to share theirs, too. As the Altruist's Opportunity illustrates, when we publicly contribute as much as we can, in the end we all win.

Which brings us to the first tale...



## ENDNOTES

1. Although I don't recall the exact figures from the time, this was still true ten years after this conversation took place. In 2007, the cost to sponsor a home built in Mexico was around \$5,700, which is about a week's gross pay for someone earning \$300,000 per year – not an unreasonable salary for an experienced cardiac surgeon.  
Habitat for Humanity. (2007) "Habitat for Humanity Mexico." Habitat for Humanity International. Atlanta, GA. [Link](#)
2. At the end of July 2012, Apple had about \$117 billion in cash. In August 2012, the US Treasury had an opening balance of \$90 billion and closing balance of \$30 billion.  
US Department of the Treasury. (2012) "Daily Treasury Statement: Cash and Debt Operations of the United States Treasury." US Treasury Financial Management Service. Aug. 31, 2012. [Link](#)  
George Stahl. (2012) "Apple Still Generating Boatloads of Cash." The Wall Street Journal. Jul. 24, 2012. [Link](#)  
This comparison has been made regularly in popular media.  
Paul La Monica. (2012) "With \$97.6 Billion, Apple Has More Cash Than..." CNN Money. Jan. 25, 2012. [Link](#)
3. Kristen Renwick Monroe. (1996) "The Heart of Altruism: Perceptions of a Common Humanity." Princeton University Press. Princeton, NJ.
4. Lindsay Iversen, Stephen Whitehead, Robin Wilkinson. (2011) "The Best Laid Plans? Avoiding Unintended Consequences in Public Policymaking." Arium. London, England.
5. Associated Press. (2012) "Typical CEO Made \$9.6 Million Last Year, Study Finds." Los Angeles Times. May 25, 2012. [Link](#)
6. Katie Hafner. (2006) "In Web World, Rich Now Envy the Superrich." The New York Times. Nov. 21, 2006. [Link](#)
7. The gross national income per capita (in current \$US) in 2009 in the United States was \$44,999.50; in the Democratic Republic of Congo, it was \$160.  
UN Department of Economic and Social Affairs, Statistics Division. (2012) "World Statistics Pocketbook." Series V, No. 36. United Nations Publications. New York, NY.
8. Craig Haney, Curtis Banks, Philip Zimbardo. (1973) "Interpersonal Dynamics in a Simulated Prison." International Journal of Criminology and Penology. Vol. 1, No. 1, pp. 69-97.
9. Philip Zimbardo. (2007) "The Lucifer Effect: Understanding How Good People Turn Evil." Random House. New York, NY.

10. Ed Diener, Robert Biswas-Diener. (2002) "Will Money Increase Subjective Well-Being?" *Social Indicators Research*. Vol. 57, No. 2, pp. 119-169.
11. A detailed analysis of this concept that includes some great counterpoints: Kenneth Bowers. (1973) "Situationism in Psychology: An Analysis and a Critique." *Psychological Review*. Vol. 80, No. 5, pp. 307-336.
12. Assume a prisoner's dilemma group of X people in which Y cooperate, with benefits B and costs C, and outcomes of J (both cooperate), K (player cooperates, opponent defects), L (player defects, opponent cooperates), and M (both defect).
- Rewards for cooperators:  $(Y - 1)J + (X - Y)K = (Y - 1)B - (X - 1)C$
- Rewards for defectors:  $Y(L) + (X - Y - 1)M = Y(B)$
13. As group size increases, overall cost of cooperation increases, and the individual incentive for contributing to the public good decreases, making cooperation difficult and unlikely for large groups.
- Mancur Olson. (1965) "The Logic of Collective Action: Public Goods and the Theory of Groups." Harvard University Press. Cambridge, MA.
14. The Prisoner's Dilemma is discussed extensively in countless books, including:
- Anatol Rapoport, Albert Chammah. (1965) "Prisoner's Dilemma." University of Michigan Press. Ann Arbor, MI.
- William Poundstone. (1992) "Prisoner's Dilemma." Doubleday. New York, NY.
- Richard Dawkins. (1976, 2006) "The Selfish Gene." Oxford University Press. New York, NY.
- Note: Dawkins also describes genes that always make altruistic choices as "saintly." (Or "silly.")
15. In a one-shot Prisoner's Dilemma, that is. In repeated games with the same partner, it pays off to be conditionally cooperative.
16. Robyn Dawes, Richard Thaler. (1988) "Anomalies: Cooperation." *The Journal of Economic Perspectives*. Vol. 2, No. 3, pp. 187-197.
- This topic is expanded upon in:
- Richard Thaler. (1992) "The Winner's Curse: Paradoxes and Anomalies of Economic Life." Free Press. New York, NY.
17. Andrew Delton, Max Krasnow, Leda Cosmides, John Tooby. (2011) "Evolution of Direct Reciprocity Under Uncertainty Can Explain Human Generosity in One-Shot Encounters." *Proceedings of the National Academy of Sciences*. Vol. 108, No. 32, pp. 13335-13340.
18. Several of these differences also apply to public goods games as well. The main difference between The Altruist's Opportunity and traditional public goods games is the inclusion of Option B – the option to give a small amount

which, although inefficient, is a popular option that can give people the feeling of doing a generous deed without making much difference or creating a net benefit.

For examples of traditional public goods models, see:

Mancur Olson. (1965) "The Logic of Collective Action: Public Goods and the Theory of Groups." Harvard University Press. Cambridge, MA.

19. The values of the options are intended to illustrate the relative values of different strategies for giving. Giving a little is often inefficient and causes the value of our contribution to be less than what we sacrificed to give it, as in the example of the surgeon, or baking a pie for a bake sale that will sell for less than the value of the ingredients we use and time we spend. We often know this as we are giving, but do so anyway out of a sense of social obligation.
20. This is not a strictly rational reason, but it makes a sort of emotional sense and appeals to a person's sense of fairness.

Choosing to give a lot in order to persuade others to do so is a gamble. In this situation, it is a \$50 bet that can pay off between \$0 and \$350, depending on the actions of the seven remaining participants.

Anecdotally, you might recognize this type of thinking if you have ever been to Las Vegas. Gambling includes an inherent risk of loss, the pain of which people will go to great lengths to avoid. Tourists visiting casinos often make pacts with themselves to limit their losses, or at least their sense of loss. They give themselves a budget which they will feel comfortable losing, rationalizing it as a justified expense for an evening of entertainment. Similarly, if they win at first, many put this starting budget aside, reasoning that if they lose their new winnings, at least they would be no worse off than when they started.

For example, if someone entered a casino with \$150, then won until he had \$500, then lost until he had \$150 again, he might console himself by focusing on the idea that he is no worse off than if he had not bet, rather than feeling like he lost \$350.

The Altruist's Opportunity example has some important differences, most notably that the future winnings and losses are the result of other people's actions, but similar reasoning could be used when visualizing outcomes at the time of decision-making.

21. Conclusions drawn from:

Armin Falk, Urs Fischbacher. (2006) "A Theory of Reciprocity." *Games and Economic Behavior*. Vol. 54, No. 2, pp. 293-315.

Erich Fehr, Urs Fischbacher. (2003) "The Nature of Human Altruism." *Nature*. Vol. 425, No. 6960, pp. 785-791.

Christoph Hauert, Silvia De Monte, Josef Hofbauer, Karl Sigmund. (2002) "Volunteering as Red Queen Mechanism for Cooperation in Public Goods Games." *Science*. Vol. 296, No. 5570, pp. 1129-1132.

Urs Fischbacher, Simon Gächter, Ernst Fehr. (2001) "Are People Conditionally Cooperative? Evidence from a Public Goods Experiment." *Economics Letters*. Vol. 71, No. 3, pp. 397-404.

Claudia Keser, Frans Van Winden. (2000) "Conditional Cooperation and Voluntary Contributions to Public Goods." *The Scandinavian Journal of Economics*. Vol. 102, No. 1, pp. 23-39.

22. Warren Buffett. (2010) "My Philanthropic Pledge." *Fortune*. Jun. 16, 2010. [Link](#)
  23. One of the best examples (not of charitable capitalism, but of powerful people following other, highly influential powerful people to be generous): Giving Pledge, LLC. (2011) "Directory [of Donors]." *GivingPledge.org*. Dec. 31, 2011. [Link](#)
  24. Ralph Nader. (2009) "Only the Super-Rich Can Save Us!" Seven Stories Press. New York, NY.
  25. Matthew Bishop, Michael Green. (2008) "Philanthrocapitalism: How the Rich Can Save the World." Bloomsbury Press. New York, NY.
  26. One notable exception in the aforementioned book is Google, which has several philanthropic efforts integrated into its core business.
  27. Charity Navigator. (2012) "10 Charities Overpaying Their For-Profit Fundraisers." *CharityNavigator.org*. May 15, 2012. [Link](#)
  - David Fitzpatrick, Drew Griffin. (2012) "Lawmakers to Investigate Disabled Veterans Charity." *CNN*. May 24, 2012. [Link](#)
  - CBSNewYork/AP. (2012) "Report: Some Police Charities Spending More Donation Money on Fundraising Than Causes." *CBS Local Media*. Mar. 7, 2012. [Link](#)
  - Erica Johnson. (2011) "Cancer Society Spends More on Fundraising Than Research." *CBC News*. Jul. 6, 2011. [Link](#)
  28. Charles Bronfman, Jeffrey Solomon. (2009) "The Art of Giving: Where the Soul Meets a Business Plan." Jossey-Bass. San Francisco, CA.
  - Matthew Bishop, Michael Green. (2008) "Philanthrocapitalism: How the Rich Can Save the World." Bloomsbury Press. New York, NY.
  29. Some feared these new structures could be abused to direct corporate funds toward political purposes, although with restrictions on political spending recently lifted, this may be a moot point.
- Also: Maryland was the first to introduce the benefit corporation in 2010, and at the time of writing, six other states have also followed suit. Similarly, the low-profit limited liability corporation has been accepted in nine states since its introduction in 2008. In addition, Washington also has a similar legal entity known as a social purpose corporation.
- Evangeline Gomez. (2012) "The Rise of The Charitable For-Profit Entity." *Forbes*. Jan. 13, 2012. [Link](#)

Malika Zouhali-Worrall. (2010) “For L3C Companies, Profit Isn’t the Point.” CNN Money. Feb. 9, 2010. [Link](#)

John Tozzi. (2012) “Washington State Tailors ‘Social Purpose Corporation’ to Sustainable Business.” Bloomberg BusinessWeek. Mar. 16, 2012. [Link](#)

30. Toms Shoes. (2012) “One for One Movement.” Toms.com. Apr. 16, 2012. [Link](#)

31. Cogitamus Consulting. (2009) “The Global Footwear Market: Athletic and Non-Athletic Shoes.” Packaged Facts. Rockville, MD.

32. Christina Binkley. (2010) “Charity Gives Shoe Brand Extra Shine.” The Wall Street Journal. Apr. 1, 2010. [Link](#)

Kristi Oloffson. (2010) “In Toms’ Shoes: Start-Ups Copy ‘One-for-One’ Model.” The Wall Street Journal. Sep. 30, 2010. [Link](#)

Note: Sketchers also infamously copied TOMS with its BOBS shoe line.

Simon Mainwaring. (2010) “TOMS vs. BOBS: How Skechers Shot Themselves in the Foot.” Fast Company. Oct. 21, 2010. [Link](#)

Cotten Timberlake. (2012) “Skechers Chases Toms Seeking to Woo Do-Good Millennials: Retail.” Bloomberg. Aug. 8, 2012. [Link](#)

33. It is important to note that current descriptions of Apple as the most valuable company in history do not take inflation into consideration.

Suzanne Tindal. (2012) “Apple the Most Valuable Company Ever, If You Forget Inflation.” ZDNet. Aug. 21, 2012. [Link](#)

Of course, if Apple continues growing, it will take the unqualified title as well, and projections are strong. One novel projection:

Horace Dediu. (2012) “Projecting iOS Devices Sales through iTunes Account Growth.” Asymco. Sep. 17, 2012. [Link](#)

34. David Whelan. (2004) “Charity and the Forbes 400.” Forbes. Sep. 24, 2004. [Link](#)

35. Microsoft still held the record for the highest market capitalization value for an American company at the time of writing, even without adjusting for inflation, but it was later broken by Apple.

E.S. Browning, Steven Russolillo, Jessica Vascellaro. (2012) “Apple Now Biggest-Ever U.S. Company.” The Wall Street Journal. Aug. 20, 2012. [Link](#)

David Goldman, Stacy Cowley. (2012) “Apple’s Value Soars to \$600 Billion.” CNN Money. Apr. 10, 2012. [Link](#)

36. David Einstein. (2000) “Gates Steps Down as Microsoft CEO.” Forbes. Jan. 13, 2000. [Link](#)

Although he kept working at Microsoft, Gates phased himself out from day-to-day operations and began focusing on his philanthropic work. His last regular day at Microsoft was June 27, 2008.

Steve Lohr. (2008) "Microsoft Seeks Path Beyond Gates's Legacy." The New York Times. Jun. 27, 2008. [Link](#)

37. Andy Beckett. (2010) "Inside the Bill and Melinda Gates Foundation." The Guardian. Jul. 12, 2011. [Link](#)

At the time, technically, the Stichting Ingka Foundation may have been the largest "charity" in the world, although some said it was little more than a tax shelter for IKEA's profits.

Staff Reporter. (2006) "Flat-Pack Accounting." The Economist. May 11, 2006. [Link](#)

38. Bill & Melinda Gates Foundation. (2012) "Foundation Fact Sheet." GatesFoundation.org. Sep. 30, 2011. [Link](#)
39. Luisa Kroll. (2011) "The World's Biggest Givers." Forbes. May 19, 2011. [Link](#)
40. Matthew Herper. (2012) "Bill Gates on India's First Polio-Free Year." Forbes. Jan. 12, 2012. [Link](#)
41. Bill Weir. (2012) "Bill Gates on Using His Money to Save Lives, Fixing U.S. Schools, Reflecting on Steve Jobs." ABC News. Jan. 24, 2012. [Link](#)

John Pavlus. (2012) "Infographic of the Day: Bill Gates Is a Better Superhero Than Batman." Fast Company. Jan. 20, 2012. [Link](#)

42. Luisa Kroll. (2012) "The Giving Pledge Signs On 12 More Wealthy Americans Including Tesla's Elon Musk and Home Depot's Arthur Blank." Forbes. Apr. 19, 2012. [Link](#)
43. Andrew Ross Sorkin. (2011) "The Mystery of Steve Jobs's Public Giving." The New York Times. Aug. 29, 2011. [Link](#)
44. Brandon Griggs. (2012) "Gladwell: In 50 years, People Will Forget Steve Jobs." CNN. Jun. 8, 2012. [Link](#)

An interesting counterpoint:

Brian Caulfield. (2012) "Why Malcolm Gladwell Is Wrong about Steve Jobs, in Three Words." Forbes. Jun. 8, 2012. [Link](#)

45. Staff Reporter. (2012) "The World's Billionaires." Forbes. Apr. 24, 2012. [Link](#)
- Steven Musil. (2008) "Gates Dethroned As World's Richest Man." CNET. Mar. 5, 2008. [Link](#)
46. Tony Phillips. (1999) "ET, Phone SETI@home!" NASA Science News. May 23, 1999. [Link](#)

This was several times the designers' stated expectations.

Woodruff Sullivan III, Dan Werthimer, Stuart Bowyer, Jeff Cobb, David Gedye, David Anderson. (1997) "A New Major SETI Project Based on Project SERENDIP Data and 100,000 Personal Computers." International Astronomical Union Colloquium. Vol. 161.

47. Robert Sanders. (2009) “SETI@home Project Celebrates 10th Anniversary, Though No ETs.” University of California, Berkeley. Press Release. May 19, 2009. [Link](#)
48. OPSWAT. (2011) “Security Industry Market Share Analysis – June 2011.” OPSWAT. San Francisco, CA.
49. Staff Reporter. (2010) “Microsoft Security Essentials.” CNET. Dec. 22, 2010. [Link](#)
50. This is an oversimplification, but not inaccurate. The most significant difference in structure is that MSE also includes a real-time protection service, and the most significant difference in operation is that participation in grid computing would consume more processing power, although how much it consumes could be made adjustable.
51. Gregg Keizer. (2009) “Microsoft Links Malware Rates to Pirated Windows.” Computerworld. Nov. 2, 2009. [Link](#)
52. Extrapolated from:  
 Computer Economics. (2007) “2007 Malware Report: The Economic Impact of Viruses, Spyware, Adware, Botnets, and Other Malicious Code.” Computer Economics. Irvine, CA.
53. Business Software Alliance. (2012) “Shadow Market: 2011 BSA Global Software Piracy Study.” Business Software Alliance. Washington, DC.  
 Also, Microsoft believes that in some countries, such as China, 90% of Microsoft software is pirated.  
 Jon Brodtkin. (2011) “Ballmer to Hu: 90% of Microsoft Customers in China Using Pirated Software.” Network World. Jan. 21, 2011. [Link](#)
54. Robert Sanders. (2009) “SETI@home Project Celebrates 10th Anniversary, Though No ETs.” University of California, Berkeley. Press Release. May 19, 2009. [Link](#)
55. Benjamin Gray, Christian Kane. (2010) “Updated 2010: Windows 7 Commercial Adoption Outlook.” Forrester Research. Cambridge, MA.
56. John Matson. (2010) “Volunteers’ Idle Computer Time Turns Up a Celestial Oddball.” Scientific American. Aug. 12, 2010. [Link](#)
57. Jason Thomas, Paul Hergenrother. (2008) “Targeting RNA with Small Molecules.” Chemical Reviews. Vol. 108, No. 4, pp. 1171-1224.  
 Paul Wender, Benjamin Miller. (2009) “Synthesis at the Molecular Frontier.” Nature. Vol. 460, No. 7252, pp. 197-201.  
 Hongqing Du, Melissa Cline, Robert Osborne, Daniel Tuttle, Tyson Clark, John Paul Donohue, Megan Hall, Lily Shiue, Maurice Swanson, Charles Thornton, Manuel Ares, Jr. (2010) “Aberrant Alternative Splicing and Extracellular Matrix Gene Expression in Mouse Models of Myotonic Dystrophy.” Nature Structural & Molecular Biology. Vol. 17, No. 2, pp. 187-193.

Bruce Walker, Dennis Burton. (2008) "Toward an AIDS Vaccine." *Science*. Vol. 320, No. 5877, pp. 760-764.

58. Ken Schept. (2012) "2012 BrandZ Top 100." WPP. London, England.  
Brand Keys. (2012) "2012 Brand Keys Customer Loyalty Engagement Index." Brand Keys. New York, NY.
59. There is a small power cost for running a processor at above-idle speeds, which would be paid by the end user, as is the cost for the power required to run any software. The incremental monetary cost and impact to the environment would be small compared to the value of the research, but the collective impact of this additional power consumption is significant enough to be a valid concern, and this too could be mitigated through system design. For example, by using simple performance metrics, the software could notify users when their computers were too slow to be efficient, or simply exclude those computers from processing data.
60. John Kay. (2007) "A Misleading Obsession with Share Prices." *Financial Times*. Jun. 5, 2005. [Link](#)
61. Martin Gelter. (2009) "The Dark Side of Shareholder Influence: Managerial Autonomy and Stakeholder Orientation in Comparative Corporate Governance." *Harvard International Law Journal*. Vol. 50, No.1, pp. 129-194.  
Lynn Stout. (2008) "Why We Should Stop Teaching *Dodge v. Ford*." *Virginia Law & Business Review*. Vol. 3, No. 1, pp. 164-176.  
Evangeline Gomez. (2012) "The Rise of the Charitable For-Profit Entity." *Forbes*. Jan. 13, 2012. [Link](#)
62. "Futurism" is also the name of an early 20th century social movement that occurred primarily in Italy. "Futurology" is a less ambiguous term as it has no alternate meaning; however, the words have come to be synonymous and my preference for "futurism" is purely stylistic.  
Marjorie Perloff. (2003) "The Futurist Moment: Avant-Garde, Avant Guerre, and the Language of Rupture." University Of Chicago Press. Chicago, IL.
63. Technically, many utopian works are not set in the future; however, they nevertheless describe how society could be if changes were made, which would take time.
64. For example, originally published in 1888, Edward Bellamy's *Looking Backward* was incredibly popular and entire "Bellamy Clubs" formed to further the book's ideas.  
Edward Bellamy (Author), Walter James Miller (Author of Introduction). (2000) "Looking Backward: 2000-1887." New American Library. New York, NY.  
Ralph Nader mentioned this book in an editorial about his own book.  
Ralph Nader. (2009) "Ralph Nader: Only the Super Rich Can Save Us!" *OpEdNews*. Sep. 22, 2009. [Link](#)



65. It is also interesting to note that *Atlas Shrugged* had its bestselling year in 2009, triggered by the financial crisis.

Yaron Brook. (2009) "Is Rand Relevant?" *The Wall Street Journal*. Mar. 14, 2009. [Link](#)

Ayn Rand Institute. (2010) "'Atlas Shrugged' Sets a New Record!" Press Release. Jan. 21, 2010. [Link](#)

66. Author's Note: Another major reason this book focuses so much on America is that my writing process is heavily based on research, and there is far more research available on Americans than any other population.
67. Over half of the 25 wealthiest people in the world are from the United States. Staff Reporter. (2012) "The World's Billionaires." *Forbes*. Apr. 24, 2012. [Link](#)
- Innovation is, of course, a nebulous term, and which country is the most innovative depends entirely upon the definition used.

Frederick Hess. (2011) "America Is Still the Most Innovative Country in the World." *The Atlantic*. Nov. 14, 2011. [Link](#)

For example, this report ranks the United States not first, but seventh.

Soumitra Dutta. (2011) "The Global Innovation Index 2011." INSEAD. Fontainebleau, France.

68. This is nearly verbatim from:

Luisa Kroll. (2011) "The World's Biggest Givers." *Forbes*. May 19, 2011. [Link](#)

69. Author's Note: Some Republicans who have read the book have accused me of being a bleeding-heart liberal; likewise, some Democrats have called me a regressive conservative. While it is not my intent to anger anyone, the fact that the book upsets extremists on both sides leads me to believe I have landed somewhere in the middle.

One explanation for these differences in perception is that people have difficulty recognizing flaws in their own party's arguments because their brains process them in radically different ways. Therefore, a liberal might accept any liberal ideas in this book without much thought or notice, but deeply criticize any conservative ideas, thus coming away with the perception that the book is conservative. (And vice versa.)

Drew Westen, Pavel Blagov, Keith Harenski, Clint Kilts, Stephan Hamann. (2006) "Neural Bases of Motivated Reasoning: An fMRI Study of Emotional Constraints on Partisan Political Judgment in the 2004 U.S. Presidential Election." *Journal of Cognitive Neuroscience*. Vol. 18, No. 11, pp. 1947-1958.

70. For example, the most famous Arthurian knight, Lancelot, did not appear until Chretien de Troyes rewrote the original stories 50 years after *Historia Regum Britanniae* was first written around 1136, which itself was a rewrite of earlier Welsh tales.

William Farina. (2010) "Chrétien de Troyes and the Dawn of Arthurian Romance." McFarland & Company. Jefferson, NC.

71. FanFiction.net. (2012) "Harry Potter FanFiction Archive." Apr. 18, 2012. [Link](#)
72. Facebook recently surpassed 1 billion users and is still growing, and the population of Africa is roughly 1.02 billion.  
Mark Zuckerberg. (2012) "One Billion People on Facebook." Facebook. Oct. 4, 2012. [Link](#)  
United Nations, Department of Economic and Social Affairs, Population Division. (2011) "World Population Prospects: The 2010 Revision." United Nations. Geneva, Switzerland.
73. At the time of writing, Apple's market capitalization was higher than the GDP of just over 90% of the countries listed by The World Bank.  
John Kell. (2012) "Apple Market Value Jumps Above \$600 Billion Mark." The Wall Street Journal. Apr. 10, 2012. [Link](#)  
World DataBank. (2012) "Economic Indicators: GDP per capita (current US\$)." The World Bank. Washington, DC.
74. Furthermore, much (and possibly most) published research is not reproducible, or even necessarily true.  
John Ioannidis. (2005) "Why Most Published Research Findings Are False." PLoS Medicine. Vol. 2, No. 8, pp. 696-701.
75. Clifford Mynatt, Michael Doherty, Ryan Tweney. (1977) "Confirmation Bias in a Simulated Research Environment: An Experimental Study of Scientific Inference." Quarterly Journal of Experimental Psychology. Vol. 29, No. 1, pp. 85-95.
76. Karl Popper. (1959) "The Logic of Scientific Discovery." Hutchinson. London, England.  
This work was originally published in German by the same author 25 years earlier.  
Karl Popper. (1934) "Logik Der Forschung." Springer. Vienna, Austria.



2040



PUBLIC PROBLEMS ATTACKED BY PRIVATE CITIZENS!

# TALES FROM 2040

#001

JULY  
2011

HOW APPLE HELPED THE  
TEA PARTY AND OCCUPY  
MOVEMENTS FIX POLITICS

A SHORT STORY FROM A BRIGHTER FUTURE  
BY CHRISTOPHER CARDINAL

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# HOW APPLE HELPED THE TEA PARTY AND OCCUPY MOVEMENTS FIX POLITICS

Tim Cook. The name alone evokes awe and respect, and is synonymous with American triumph. Since 2011, Cook has run Apple Inc., the world's most valuable company,<sup>1</sup> through three decades of innovation and profit. To the business world, he is the pinnacle of success, a leader to follow on the path to fame and fortune. To the rest of the world, he is revered as something far more important: a champion of democracy.

In fact, despite reigning as the world's richest person since 2026, Cook is widely regarded as a hero for the common citizen. Of all his accomplishments, his greatest was not developing a new product, but rather using technology to help improve the political process. He forever changed the way we discuss issues and find our leaders, but to understand how and why he did it, we must first look at Cook's predecessor: Steve Jobs.

## A TOUGH ACT TO FOLLOW

Many have said that the life of Steve Jobs was the stuff of legend, and with good reason. To begin, his work history reads more like the origin story of some fictional corporate superhero than a typical résumé.<sup>2</sup>

In 1976, when Jobs was barely 21, he and two partners founded Apple Computer in his parents' garage. Just four years later, the company went public with the largest IPO in a quarter of century, minting more new millionaires than any other company had ever produced.<sup>3</sup> Soon thereafter, Apple made history by introducing the *Macintosh* with its famous "1984" commercial, which was aired only once during the Super Bowl<sup>4</sup> and was later named the greatest ad of all time.<sup>5</sup> The next year, just as the dawn of the personal computer was rising, Jobs found himself on the losing end of a management power struggle and was asked to resign.

He immediately founded another company, NeXT Computer, and the following year he bought a computer graphics group which would later become Pixar Animation Studios. A decade later, these investments paid off. In 1995, Pixar released *Toy Story*, the world's first feature-length computer generated movie. Historians mark this as the beginning of the end of live action Hollywood filmmaking and the start of the modern, all-digital era. (Pixar also went on to create Lisa Newton, the first computer-generated actor to win an Academy Award.) The next year, Apple bought NeXT Computer, which, in a twist rarely seen in the corporate world, returned Jobs to the first company he had helped found. Within a few months, the current CEO was removed and Jobs was back in charge of the entire enterprise.<sup>6</sup>

During his remaining time there, Apple released a steady stream of wildly popular products that redefined the market. After Apple started making them, nobody called anything a “portable digital music player” – everyone just called them *iPods*. The company soon saw similar success in the smartphone and tablet computer categories with the *iPhone* and the *iPad*, respectively.

Jobs led Apple to heights that other CEOs only dream of. When he took over again, the company was the joke of the tech industry.<sup>7</sup> Under his leadership, Apple came back from the brink of obsolescence to become the world’s most valuable company<sup>8</sup> with the world’s most valuable brand.<sup>9</sup> While rivals sold competing products at a loss,<sup>10</sup> the *iPad 2* sold for over twice what it cost to make.<sup>11</sup> Apple grew to earn three-quarters of the profit made by the entire worldwide mobile phone market – more than three times that of Samsung, Nokia, Research in Motion, HTC, Motorola, LG, and Sony combined – within just four years of releasing the first *iPhone*.<sup>12</sup> During that same period, *Fortune* named Apple the world’s most admired company every single year.<sup>13</sup> When Jobs took over in 1997, AAPL shares were trading at record lows; when he resigned in 2011, the stock was worth around 450 times more.<sup>14</sup>

When Jobs died of pancreatic cancer six weeks later, it touched off the largest outpouring of sentiment in recent history, one that overshadowed the deaths of well-known celebrities and victims of natural disasters alike. It seemed the world was mourning an international hero, not the CEO of a tech company. Just seven weeks of sales made his biography Amazon’s bestselling book of the year.<sup>15</sup> His death created the largest reaction on Twitter at the time<sup>16</sup> and made headline news around the globe, eliciting



commentary and elegies from world leaders.<sup>17</sup> In the coming days, major magazines published commemorative issues dedicated to his life<sup>18</sup> as crowds of fans gathered at Apple Stores to pay tribute to their fallen idol.<sup>19</sup>

## **A CHIPPED PEDESTAL**

The media had long been very kind to Jobs. He was a charismatic man who lived a comeback story of victory and died at the peak of his career. He also had millions of evangelical followers, and to speak poorly of him was tantamount to blasphemy. However, one of the harsh truths of journalism is that the industry constantly demands a new angle. The same publicity machine that builds people up into demigods takes equal pleasure in cutting them down to size.

After his death, another picture of Jobs began to come to the forefront, one of a vicious, mean-spirited tyrant. A selfish egomaniac who took too much credit for others' accomplishments. A man who not only could do wrong, but had, and who perhaps did not deserve such unmitigated adoration.<sup>20</sup> Many of the negative details were limited to Jobs as an individual, but others, those about his business practices, started to form blemishes on Apple's polished image.

One of the largest scandals to gain attention after Jobs' death concerned Foxconn, the Taiwanese manufacturer that made Apple products. Reports said their factories were military-style labor camps where workers, frequently children, were treated like machines and forced to work long hours, often seven days a week, then crammed into crowded dormitories between shifts. In the factory, some faced public humiliation for poor performance; others,

deadly chemicals and explosions, all for about a dollar an hour. Worker suicide was so common that Foxconn installed nets around their buildings to catch those who jumped from the roof.<sup>21</sup>

Furthermore, activists called out Apple for supporting rape, torture, and genocide by using “conflict minerals.”<sup>22</sup> Many raw materials used in high-tech devices came from places like the Democratic Republic of Congo, where the world’s poorest people<sup>23</sup> lived on top of mineral deposits worth more than the GDP of the United States and Europe combined.<sup>24</sup> Congo was also home to an ongoing civil war, the deadliest conflict since World War II.<sup>25</sup> Critics pointed out that money we spent on our favorite electronic devices ended up funding African militias,<sup>26</sup> which United Nations representatives said were responsible for the worst acts of violence and rape in the world.<sup>27</sup>

Consumers were horrified to discover that their shiny iGadgets had come at a terrible human cost. Thought leaders called for Apple boycotts,<sup>28</sup> senators demanded answers,<sup>29</sup> and activists signed petitions<sup>30</sup> as the sleek devices once embraced by the cultural elite began turning into symbols of exploitation. However, those who dug a little deeper found that the unpleasant realities of the global economy were nothing new – nor were they unique to Apple.

The conflict in Congo had started long before Apple came to power, and most companies worldwide purchased their raw materials from the same war-torn sources.<sup>31</sup> Further complicating the issue, Foxconn did not only make *iPhones* and *iPads*. It also made computers for Dell, Hewlett-Packard, and IBM, mobile phones for Motorola, Nokia, and Samsung, and video game consoles for Microsoft,

Nintendo, and Sony. In fact, that single corporation assembled about 40 percent of all consumer electronics in the entire world.<sup>32</sup>

Apple could have easily afforded to pay Americans to make their products, but manufacturing had moved out of the country decades earlier – to Japan in the 1960s and later to Mexico in the 1980s – and it never returned. Part of the reason Foxconn got the job was that no company in the US could have handled it.<sup>33</sup>

Even liberal economists would explain that low-paying jobs overseas actually benefit poor workers more than the rich multinational companies who employ them,<sup>34</sup> and that wage rates had nothing to do with the cost of an *iPhone* and everything to do with the relative cost of labor throughout Asia and the rest of the world.<sup>35</sup> Plus, the wages Foxconn paid its workers were high for China,<sup>36</sup> and far higher than in other Asian countries like Vietnam, where the women who assembled the world's most popular digital cameras were paid about 80 percent less than workers in Foxconn factories.<sup>37</sup>

Furthermore, the working conditions at Foxconn were not as bad as first reported. An episode of NPR's *This American Life* that described the wretched lives of Foxconn workers became its most popular broadcast ever<sup>38</sup> and sparked a widely-publicized protest against Apple.<sup>39</sup> However, the story was later retracted after another journalist investigated and found that many of the details were fabricated to make the story more dramatic.<sup>40</sup> (In fact, Foxconn's injury rate was far lower than that of American manufacturing workers.)<sup>41</sup>

As far as workers killing themselves, this too was exaggerated, as stories about suicide often are. For example, halfway through 2012, it was widely reported that more American troops had taken their own lives that year than had been killed in the war in Afghanistan.<sup>42</sup> However, this story juxtaposed death counts between the 87,000 troops in Afghanistan<sup>43</sup> and the nearly 1.5 million total active-duty military personnel.<sup>44</sup> While it was a clever way to make sensational headlines, comparing apples and oranges in this manner was nearly meaningless. The way it was presented, however, suggested the suicide rate was extraordinarily high, when in reality it was nearly identical to the rate among all American men of military age, a detail the media failed to mention.<sup>45</sup> Such was the case with the coverage of the Foxconn worker suicides. Considering the company employed close to a million people, the overall suicide rate of its workers was actually remarkably low – lower than the rest of China, and lower than America for that matter.<sup>46</sup>

The truth was hard to look at, but it was just as hard to blame it all on one corporation. Nevertheless, Apple's position at the top of the market made it a lightning rod, and the company took a turn serving as the whipping boy for the entire tech industry.<sup>47</sup> For example, one headline read, "Mass Suicide' Protest at Apple Manufacturer Foxconn Factory," yet the story failed to mention that the factory actually produced *Xbox 360* game consoles for Microsoft.<sup>48</sup>

However, once people learned that nearly every electronic product they owned was made the same way, the issue didn't seem so simple anymore. The typical supercenter carried over 100,000 different items, each made up of

parts and ingredients from all around the world.<sup>49</sup> Feeling guilty over electronics meant having to feel guilty over almost every product imaginable, from cars to clothing, even fresh produce.<sup>50</sup> When forced to choose between a life of modern comfort and the moral high ground, most people meekly clutched their mobile phones and moved on to the next social cause.

When it came to manufacturing, Apple turned out to be the same as every other company. However, when it came to charity, Apple did indeed “think different,” and not in a good way. When these facts came to light, the ensuing scandal couldn’t be swept away quite so easily.

Virtually every large company in America donated some of its profits, but Apple did not, on orders that came straight from the top. Upon returning in 1997, Steve Jobs cut every single philanthropic program across the company, saying that costs needed to be reduced until the business was profitable again.<sup>51</sup> However, during his tenure, even after making some of the largest profits in history,<sup>52</sup> those programs were never restored.<sup>53</sup>

Historically, the Apple faithful worshipped Jobs and vilified his rival Bill Gates,<sup>54</sup> even though Gates created the largest charitable organization ever<sup>55</sup> and devoted his life to fighting global poverty and disease, saving millions of lives.<sup>56</sup> Whereas Jobs took funding away from charities, Gates did the opposite. Gates led by example, pledging to donate most of his vast fortune,<sup>57</sup> and he helped convince over 80 more of the superwealthy to do so as well.<sup>58</sup>

Jobs, on the other hand, chose not to share any of his personal \$8.3 billion fortune,<sup>59</sup> a decision that many didn’t understand, but with which few could argue. After all, it

was his money. He earned it; he could spend it as he pleased. However, Jobs didn't earn every dollar Apple made as a company, yet he made sure none of them went to charitable causes. Many other people worked at Apple, and they did not all feel the same way toward helping the less fortunate. Jobs had imposed his will on the entire company, keeping the fruits of everyone's labor locked away from doing good.

When Jobs died, Apple was worth more than all the banks in the European Zone combined.<sup>60</sup> In fact, it was worth more than the entire economies of most European countries.<sup>61</sup> At the end of 2011, Apple had more money sitting in the bank than the United States Treasury had<sup>62</sup> – over \$100 billion in cash, just waiting to be put to work.<sup>63</sup> Yet despite all that wealth, Jobs had adamantly refused to donate any of it, leaving even the most zealous Apple fans questioning why the company was so stingy.

## **A BITTERSWEET INHERITANCE**

When Cook took over in late 2011, tablet sales had just quadrupled over the previous year and Apple had two-thirds of the market share.<sup>64</sup> Then came an astounding holiday season, during which the company broke even more sales records. As a result, Apple became the world's leading smartphone manufacturer<sup>65</sup> and gained a solid edge over ExxonMobil to become world's most valuable company.<sup>66</sup>

Cook inherited an incredibly profitable global corporation; however, he also inherited some public relations nightmares at home. The US economy was still in a slump, and Jobs had said Apple's manufacturing jobs would never return from Taiwan.<sup>67</sup> Even worse, the revelations that

Apple had made a fortune off exploited workers while giving nothing to charity seemed downright un-American, and reeked of corporate greed at its worst.

To Cook's credit, he addressed the Foxconn controversy head on, publishing for the first time a list of all its main suppliers<sup>68</sup> and allowing a watchdog organization to inspect the working conditions at their factories.<sup>69</sup> He also lifted the ban on charitable giving within days of assuming the role of CEO, instituting a generous program through which Apple would match employee contributions to the non-profits of their choice.<sup>70</sup> But the whispers of this good news were drowned out by fanfare surrounding Jobs and his death.

Tim Cook may not have his predecessor's showmanship. Then again, no one does. Jobs had such a strong personality that it was often said to distort reality around him,<sup>71</sup> and some predicted Apple would falter without it.<sup>72</sup> However, although Cook's style is more reserved, he has shown he certainly knows how to lead the company to design award-winning products. Over the years, he has exceeded even Jobs' ability to make Apple successful.<sup>73</sup>

Whereas history remembers Jobs as a selfish tyrant, though, Cook is seen worldwide as a benevolent king, and back at home, an American hero. This is because shortly after he became CEO of Apple, Cook helped revolutionize politics in the United States. To do this, he didn't run for office, or fund a campaign, or even lobby to change any laws. Instead, he did what all the greatest minds in technology have always done best: He took a good idea and tweaked it to make it work better.<sup>74</sup>

## POLITICS, DISASTROUS AND UNPALATABLE

We are lucky that Cook turned his attention to problems outside the field of technology, because the state of American politics only a few decades ago was a disgrace. Some readers may be too young to have seen it firsthand, but the rest of us remember it all too well.

By the early 2010s, only one out of ten Americans thought Congress was doing its job properly.<sup>75</sup> The public had almost no voice in its government, which was a dark shadow of what its founders had envisioned. For example, the Senate, with its fixed size and long terms, was meant to look after the interests of states, and to balance this, the House of Representatives was supposed to reflect the views of the common citizen. To ensure that public opinion was heard, the framers of the Constitution intended for Representatives to be elected by and speak for relatively small communities. To accomplish this, they designed the House to add seats as necessary, which it did for well over a century.

But in what may have been the most drastic move of gerrymandering, in the 1920s, the ruling party in Congress refused to reapportion its districts as expected and arbitrarily capped the size of the House in order to avoid losing power.<sup>76</sup> As the population exploded, each Representative came to speak for more and more constituents – about 20 times as many as in the time of the Founding Fathers,<sup>77</sup> who had decided against such limitations.<sup>78</sup> Eventually, this concentration of power turned the House into a second Senate, similarly controlled by special interests and out-of-touch with the average American.



The political machine gave politicians in Washington little reason to listen to their constituents back home. Despite their abysmal approval ratings, incumbents could almost always get re-elected.<sup>79</sup> Or they could walk right into high-paying lobbying jobs, jobs promised to them while they were still in office, from the very people they were supposed to be regulating.<sup>80</sup> For example, while former Representative W. J. “Billy” Tauzin was the chairman of the House committee that oversees the pharmaceutical industry, he co-sponsored a bill that required the government to buy a huge amount of prescription drugs.<sup>81</sup> Then, almost immediately after it passed, he angered Republicans and Democrats alike by leaving Congress to become the head of PhRMA, the largest drug industry lobbying group.<sup>82</sup> There he brokered a deal forbidding the government from negotiating the prices for the drugs it had just agreed to buy, meaning that taxpayers would end up giving pharmaceutical companies even more, much more than they needed to,<sup>83</sup> adding trillions to the deficit with no plan to pay for it.<sup>84</sup> That year, Tauzin was paid over \$11 million by PhRMA.<sup>85</sup>

We told our children that anyone could run for public office, even the presidency, but beneath this thin veneer of democracy lived an ugly truth: Not just anyone could get elected. Over 90 percent of Congressional races went to the candidate with the most money,<sup>86</sup> and running a campaign was absurdly expensive. In 2010, it cost an average of nearly \$10 million to win a Senate seat.<sup>87</sup> For those without their own personal fortunes, this meant accepting huge amounts of money from large corporations and political action groups. These dollars came, of course, with strings attached, and expectations that their benefactors’ special interests be protected. In addition, donors would only give

money to candidates with a realistic chance of success, which at that time meant being part of an established party.

The political scene was dominated completely by two groups: the Republican Party of the United States and the United States Democratic Party. Even though Independents had long been the largest group of voters,<sup>88</sup> just mentioning a third party was political suicide.<sup>89</sup> Gaining recognition as a serious candidate required joining one of these two factions, which, in turn, meant subscribing wholesale to its position on every major issue. It was all-or-nothing: Supporting corporate tax cuts also meant being pro-life and opposing environmental regulations. There were only two clearly defined sets of viewpoints, leaving no room for independent thought.<sup>90</sup> The actual candidates barely mattered. Every election became a competition between these two parties.

Exacerbating these problems were the media. After all, having two, and only two, diametrically opposed perspectives turned every issue into a fight, which made for good television. Students of pop culture will remember that during the beginning of this century, a genre of entertainment known as “reality television” was extremely popular. Although heavily scripted,<sup>91</sup> these programs pretended to be authentic by using untrained people in place of professional actors. Many reality shows were made with the same formula: Gather a group of flamboyantly narcissistic people, create some artificial conflict, film the chaos that ensues, then edit it to make it look like everyone hates everybody else. This was the process used to make the programs that defined the reality genre, like *The Real World*, *Survivor*, and *The Apprentice*. However, the cable

news networks also used this exact model to make dozens of “news” shows featuring nothing but belligerent pundits, and the more they screamed at each other, the more people tuned in.

Legitimate journalists were forced to abandon their principles to survive in a harmful race for ratings, and the bar kept getting lower. Traditional news shows sensationalized topics by reporting only the most radical opinions, leaving any nuance, as well as the perspectives of the vast majority of the population, absent. They delivered apocalyptic dread on a daily basis, then forgot each crisis as soon as a new story arose. Newspapers, facing continually shrinking readership and staff, abandoned fact-checking altogether and just reprinted talking points from special interest groups. Talk radio and activist websites spewed false information, comforting likeminded audiences by parroting baseless rumors and misguided beliefs.<sup>92</sup> More than ever before, the public felt the media was inaccurate and partisan, controlled by special interests.<sup>93</sup>

The vacuum created by this perversion of journalism left no one to believe. Shortly after Walter Cronkite’s death, *Time* conducted a poll asking Americans to name the country’s most trusted television newscaster.<sup>94</sup> The winner by a landslide: Jon Stewart, a comedian performing on what he called a “fake news” program.<sup>95</sup> Despite *The Daily Show* winning numerous awards, including two Peabody Awards for Excellence in Broadcasting on top of the longest winning streak in Emmy history,<sup>96</sup> Stewart himself chalked the poll results up to the lack of quality in mainstream news rather than any excellence on his part.<sup>97</sup> The next year, another poll showed that only 12 percent of

Americans knew that their taxes had been lowered, and twice as many thought the administration had actually raised them.<sup>98</sup> Considering the state of the media, it was hard to blame anyone for not knowing the truth.

What passed for political debates were really just shouting matches between crackpot extremists. We didn't vote for the candidates we thought would do the best job; instead, we voted against the ones the media convinced us to hate. The noise from the fringes drowned out everyone in the middle. While Democrats and Republicans quibbled dramatically over millions, the largest corporations in the world, who donated generously to both sides, quietly received tax breaks and bailouts worth trillions.

## **THE RISE AND FALL OF THE TEA PARTY**

One group that noticed was the Tea Party, a political movement started in 2009 to protest wasteful and irresponsible fiscal policies.<sup>99</sup> And the nation started to notice the Tea Party, but hardly for the right reasons.

In the beginning, most mainstream media outlets were disrespectful toward the Tea Party.<sup>100</sup> They painted them as a group of lunatics: fanatically conservative old white men who shouted racist slurs while wearing colonial costumes and wielding misspelled signs. While a few people like this existed, they were a vocal minority who were hardly representative of the movement as a whole. In reality, apart from skewing conservative, members of the Tea Party were not that different from the rest of America.<sup>101</sup> In fact, the person who organized what many Tea Party leaders consider to be the movement's first protest was an intelligent, articulate woman in her twenties named Keli

Carender. Describing her, Jenny Beth Martin, co-founder of the Tea Party Patriots, said:

*She's not your typical conservative ... She's an actress. She's got a nose ring. I think it's the thing that's so amazing about our movement.*<sup>102</sup>

The media not only misrepresented who they were, but also what they wanted. The original priority of the Tea Party was to restore financial stability by reducing spending, taxes, and the deficit. However, rational arguments about fiscal policy do not make interesting television. What the media showed instead were an outspoken few howling in fury about how the president was secretly Muslim or how same-sex marriage would destroy civilization, despite the fact that virtually no one within the organization thought these were the most pressing issues.<sup>103</sup>

Adding to the confusion, the term “Tea Party” was widely misappropriated. It was borrowed by billionaires astroturfing for corporate interests as well as by a caucus of House Republicans, who both individually and collectively cast several votes that contradicted the ideals they supposedly represented. From lazy journalists to politicians riding the coattails of a nationwide movement, the actions of a few high-profile individuals tarnished the Tea Party name. All this misrepresentation only added to the frustration of its members, who above all else felt their voices were not being heard. Despite varying opinions on many topics, the main problem on which Tea Party members could agree was the status quo. Virtually everyone who was part of the Tea Party disapproved of the way Congress was handling its job and thought that most members should be replaced.<sup>104</sup>

## A BLEAK OUTLOOK

A poll taken the year the movement started showed that four in ten people held a favorable view of the Tea Party.<sup>105</sup> In the 2010 midterm elections a year later, a wave of first-time politicians defeated Democrats who used to be untouchable, and over 40 Tea Party-backed candidates won seats in the House, reclaiming it for the Republicans.<sup>106</sup> At the time, about seven out of ten people felt the movement had gotten people more politically involved<sup>107</sup> and thought that Congressional leaders should consider the Tea Party's positions when they made decisions.<sup>108</sup>

The newcomers immediately found themselves at the center of an ugly fight.<sup>109</sup> Conservative lawmakers refused to raise the federal debt ceiling, a move that threatened to shut down government services and damage the country's perfect credit rating, and the Tea Party led the charge.<sup>110</sup>

Liberals blamed politicians for creating an artificial problem, pointing out that no other country even has a debt ceiling,<sup>111</sup> or that, in the previous 30 years, Congress had raised the debt limit 43 times, 37 of which were under a Republican president, with no real conflict.<sup>112</sup> However, conservatives had a different perspective. They agreed that raising the debt ceiling was routine... and that was the problem.<sup>113</sup> After all, the government had borrowed more and more every year since 1970 (except during Bill Clinton's second term, due to budget surpluses).<sup>114</sup> Conservatives said that the proper response to a budget shortfall should be to spend less, not go deeper into debt.

At first, the public overwhelmingly agreed with the Tea Party and opposed raising the debt limit, even if it meant

interest rates would rise.<sup>115</sup> As the deadline drew close, though, and analysts predicted an economic meltdown,<sup>116</sup> most Americans thought the budget negotiations had become ridiculous,<sup>117</sup> and even most Republicans thought Congress should compromise.<sup>118</sup> At the last minute, an agreement was reached, which the Tea Party adamantly opposed until the bitter end.<sup>119</sup>

America avoided defaulting on its debts, but the world's faith in its government was shaken.<sup>120</sup> A few days later, the US credit rating was downgraded for the first time in history.<sup>121</sup> Nearly all Americans felt that the debate over raising the debt ceiling had been about petty politics rather than looking out for the country's best interests,<sup>122</sup> and many blamed the entire crisis on the Tea Party.<sup>123</sup> Public approval of everyone involved took a nosedive. Support for Congress, Republicans in particular,<sup>124</sup> and the Tea Party movement hit all-time lows.<sup>125</sup>

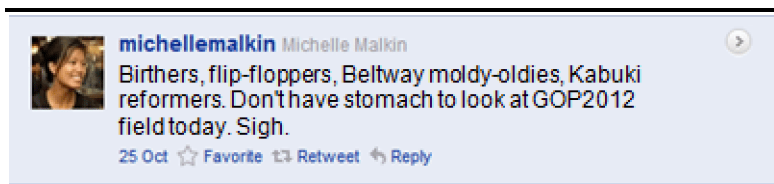
As the 2012 presidential election neared, the future looked grim for the Tea Party,<sup>126</sup> and they didn't know whom to support. While most members of the Tea Party were conservative, they were unhappy with both major parties. According to polls, about nine out of ten disapproved of then-president Barack Obama, a Democrat, but the same amount were dissatisfied with Republican leaders as well,<sup>127</sup> especially those who used the Tea Party name to gain political favor, then broke their promises.<sup>128</sup>

No Republican candidate was a clear frontrunner. In fact, the race couldn't even get started. The situation was so bad that the first scheduled debate was pushed back due to a lack of candidates.<sup>129</sup> Then, the first GOP debate held was widely criticized because only one "top-tier" candidate participated,<sup>130</sup> and even he quit shortly thereafter.<sup>131</sup>

In an October 2010 poll, when asked which national figure best represented the Tea Party, the most popular answer was “no one.”<sup>132</sup> A year later, American conservatives were still no closer to finding a leader to unite them. In an October 2011 poll, the most popular choice among Republican voters was “undecided.”<sup>133</sup>

A cavalcade of disappointing presidential hopefuls paraded across the national stage: Mike Huckabee. Sarah Palin. Donald Trump. Michele Bachmann. Ron Paul. Rick Perry. Herman Cain. Newt Gingrich. Rick Santorum. Each stepped into the limelight, won a few polls, was declared the frontrunner, then promptly burned out or bowed out.<sup>134</sup> The process made everyone look bad.<sup>135</sup> Popular conservative journalist Michelle Malkin summed up the weak field of GOP candidates in a tweet:

Illustration: Tweet from Michelle Malkin<sup>136</sup>



It looked like Mitt Romney would nab the nomination not by outshining the competition, but merely by outlasting them. Republicans were not enthusiastic about Romney,<sup>137</sup> but the sad truth was that who they nominated barely mattered, since they would not be voting for their candidate so much as voting against Obama.<sup>138</sup> As conservative talk radio host Rush Limbaugh later said:<sup>139</sup>

*[Romney] may as well be Elmer Fudd as far as we're concerned. We're voting against Obama. I don't care who they put on the ticket, we're voting against Obama.*



Still, well before the primaries, analysts were already predicting that whomever was chosen would lose.<sup>140</sup>

## BUILDING A BETTER MOUSETRAP

“These are our choices? These are the best candidates we can come up with?” a young man lamented at a Tea Party meeting in Philadelphia. “There has to be a better way.”

His outburst caught the attention of another member, Otto Scholz, a retired inventor and optical engineer, who had made a lifelong career of finding better ways to do things.

Scholz recalls in his autobiography, *Changing the Game*:

*It wasn't until that young man spoke up that I had ever really considered how we choose our presidents.*

*Throughout my whole life, whenever I have heard someone say, “There must be a better way,” I have tended to agree. I usually take it as a challenge to come up with one.*

*I have never been one to be shy. I walked up to him and I said, “Let's solve this. You and me. Right now. Let's come up with a better way to pick the president.”*

*From the way he looked at me, I knew he thought I was a crazy old man, but he was nice about it. He humored me. I bought us some hamburgers, we spent the next four hours talking, and by the end of the night, we had it.*

The young man turned out to be Ethan Beaudreau, a 20-year-old computer science student attending the first political event of his life. “I was there maybe fifteen minutes and this old guy grabs my arm and pulls me off to solve the problems of the world,” Beaudreau fondly remembers. “I had no clue what I was in for.” As it turns

out, neither of them did, because the idea they came up with that night forever changed American politics.

## A GLIMPSE OF THE FUTURE

Scholz and Beaudreau presented their idea two weeks later at the next meeting of the Philadelphia Metro Tea Party. The concept was simple: The year before each presidential election, citizens would meet locally in groups of twelve, discuss current political issues, then choose a leader from within their group. Those leaders would then meet in groups of twelve, choose a leader among them, and so on. Meeting just once a week, the entire country could be canvassed in two months with a minimum of effort: More than nine out of ten participants would attend just one meeting. This process, which they called “progressive selection,”<sup>141</sup> could identify potential leaders who would otherwise go undiscovered by the entrenched party system.

“It’s like a cross between jury duty and *American Idol*,” Beaudreau recalls saying, drawing a comparison to a popular televised talent show that held open auditions and gave national attention to previously unknown singers.

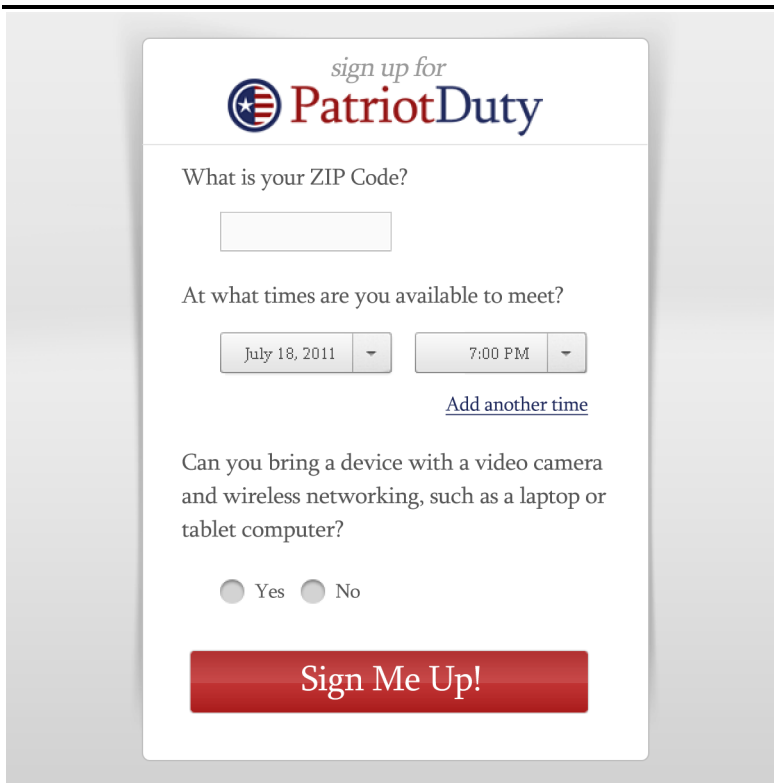
“With a touch of *Mr. Smith Goes to Washington*,” quipped Scholz, referring to a movie produced 50 years before Beaudreau was even born, which told the story of a local hero who finds himself thrust into the political scene.

The group’s reaction was tepid. Other Tea Party members said the idea sounded great in theory, but it was impossible to execute. The logistics of scheduling and recording the results of millions of meetings between strangers were unfathomably difficult.

“It’s not as hard as you think,” replied Beaudreau, who went on to demonstrate an application he had been working on since the last meeting.

He showed that in order to participate, people needed simply to visit a website and provide their email address. When the time came, the system would email back a link to a page that asked three short questions:

Illustration: Registration screen



The illustration shows a registration screen for "PatriotDuty". At the top, it says "sign up for" in a small font, followed by the "PatriotDuty" logo which features a stylized American flag icon. Below the logo, the first question is "What is your ZIP Code?" with a text input field. The second question is "At what times are you available to meet?" with two dropdown menus: one for the date (set to "July 18, 2011") and one for the time (set to "7:00 PM"). Below these is a link that says "Add another time". The third question is "Can you bring a device with a video camera and wireless networking, such as a laptop or tablet computer?" with two radio buttons labeled "Yes" and "No". At the bottom of the form is a large red button with the text "Sign Me Up!" in white.

Once enough participants had registered, the system formed groups of twelve based on location and schedule compatibility, while ensuring each group had at least two

people who agreed to bring an electronic device capable of recording the meeting.

The application then chose a local restaurant as the meeting place using information drawn from Yelp, a well-known business review website. It first checked for establishments that provided wireless internet, then looked for places with inexpensive menus, casual attire, low noise levels, convenient parking, and good reviews. The system then sent an email with the time and location of the meeting, along with links to directions. All participants had to do was show up with the confirmation code provided.

Once at the restaurant, anyone with a suitable device could click a link from the confirmation email to start a simple application designed to administer and record the meeting. First, it asked all participants to sign in using their confirmation codes while snapping a quick photo of themselves. The program then guided them through the meeting using text and voice prompts, along with the photos of the participants, to announce who should be talking and for how long.

Meetings would consist of three discussion periods, each about an important issue. The application selected a topic at random from a database, presented a few key facts, then posed a question. Each participant was then given up to two minutes to respond, with up to ten minutes for a group conversation after everyone had spoken. After all three topics, 20 minutes were allotted for the group to discuss who among them would make the best leader. Finally, a vote was taken, with each person getting a turn with the device to cast a secret ballot. Using the photos taken at the beginning, each participant could choose up to three people to move on to the next round.

Realistically, the entire meeting would probably take about an hour and a half. After the votes were cast, the meeting would be adjourned. The person with the most votes would be notified the next day and invited to proceed to the next round of meetings, repeating the process a week later. In addition, throughout the meeting, the program sent a stream of video to a central server to be saved on YouTube as a record of the meeting, which Beaudreau showed he had been doing the whole time he had been talking.

After the demonstration, the members of the Philadelphia Metro Tea Party were dumbfounded. The room was full of dropped jaws and bewilderment. No one knew quite what to say.

Scholz pressed on, saying, “I believe in the Constitution as much as anyone else here, and I think that if the Founding Fathers had the internet, this is how they would have used it. And the best part is that this idea requires no government involvement whatsoever. We can just do it on our own.”

Once the silence was broken, everyone spoke at once, trying to poke holes in the idea. Beaudreau calmly fielded the questions.

“You did this in two weeks? How do you know it works?” Beaudreau again downplayed the difficulty. He replied, “It’s a prototype, but it’s not like I built it from scratch. All the parts already existed. I just put them together.”

“What keeps people from cheating?” someone cried out. “Simple mathematics,” Beaudreau replied. He went on to explain that since the groups were chosen at random, it was nearly impossible to control who met with whom. Even if anyone did, it wouldn’t matter, he said, because the

later rounds would weed out people who did not deserve to be there. He then demonstrated how it would require almost 2,000 people to stage over 150 meetings, all on video, just to sneak one person past the third round.

“How can we get people to actually discuss the issues? Won’t people just start fighting?” asked another. Beaudreau answered that he felt that, in general, participants would go into these meetings expecting to meet people with a variety of differing viewpoints, and most would be respectful.

“But how can we make sure the one they choose supports the Tea Party platform?” Scholz took this question, answering, “We can’t. We cannot control who is picked or tell them what to think. We already have two parties that do that. What we can guarantee, though, is that we won’t get the same old candidates.”

All eyes moved to Beaudreau as he continued, saying, “Progressive selection puts the power in the hands of the people to find the best leaders among them.”

Ralph Snider, the group’s president, summed up the feelings of everyone sitting in reverent silence by saying, “Son, this is just about the most American idea I’ve ever heard, and we’re going to do everything we can to help you two make it happen.”

## **THE TEA PARTY PITCHES IN**

And help they did. The Philadelphia Metro Tea Party kept finding new ways to support the effort. Some members began plans for fundraising, while others organized meetings with Tea Party groups in neighboring areas. The person who helped the most, according to Scholz, was Dr.

Rebecca Walsh, a member of another Philadelphia Tea Party group and a political science professor at Drexel University.

After Beaudreau and Scholz demonstrated the system to several of her classes, Walsh assigned each of her students to research and prepare summaries of modern political topics. Scholz used these to create a database of discussion questions for the meetings that covered a broad spectrum of subjects.

Meanwhile, Walsh drew support from other departments. Beaudreau received help from other computer technology students to finish developing the application, and a statistics professor consulted to ensure the randomization algorithms were sound. Walsh even got a group of marketing and public relations students to design promotional materials to help present the idea to new audiences.

While Scholz and Beaudreau polished the meeting system, Snider and the other leaders of the group worked diligently to gain the support of other Tea Party organizations. This was harder than it might sound. Despite its name, the Tea Party was not actually a party at all, but rather a collective of local groups with no central management. Nearly all Tea Party organizations determined their political activities and strategies at the local level.<sup>142</sup> Fortunately, many fellow Tea Party members were just like Scholz and Beaudreau: concerned, politically active individuals who were eager to help however they could.

Most leaders of other local groups responded with enthusiasm, albeit along with a healthy dose of skepticism, and promised to help promote the idea if it proved to be

viable. One person who took a keen interest was Mark Meckler, co-founder of the Tea Party Patriots,<sup>143</sup> which loosely organized over 5,000 Tea Party groups nationwide, including several in Philadelphia. As soon as he heard about the idea, he flew out to meet Scholz and Beaudreau to discuss how he could help. After a demonstration of the system, Meckler offered to send an email to all members of his organization asking them to support it.

Meckler firmly believed that comparing the process to jury duty was the best way to communicate the idea, despite the potential for negative connotations. Scholz recalls him saying, “Patriots do not complain about jury duty. They celebrate the fact that our great country has it.” In fact, it was Meckler who suggested that the system of meetings be called “patriot duty.” Meckler leaned heavily on the jury duty metaphor in his email, which he sent to his mailing list of nearly half a million people. In it, he wrote: “Once every few years, citizens are called to gather in groups of twelve to determine the fate of one of their peers. Now we are called to do the same to determine the fate of our nation.”

## THE DAM BREAKS

“As soon as he sent that email, all hell broke loose,” says Scholz. Meckler’s email was forwarded and re-forwarded countless times, and within two days, over a quarter of a million people had signed up for meetings at *PatriotDuty.org*, the website set up by Beaudreau. Two days later, the *Wall Street Journal* ran “Tea Party Has a New Way to Pick the President” as a front-page story, and similar headlines were run by all major news outlets.



Ethan Beaudreau became a celebrity overnight. Journalists clamored to get an interview with the young man who built this amazing new system. Although Beaudreau persistently pointed out that most of the ideas came from Scholz, the media glossed over the older man's role, constantly comparing Beaudreau to Mark Zuckerberg, who launched the first version of Facebook when he was 19.<sup>144</sup> Beaudreau tried to share the spotlight, but Scholz would have none of it. "Ethan called and told me he wouldn't do any interviews without me there," recalled Scholz. "I said, 'Why not? This is an idea for the new generation. Who are they going to put on TV, an old man like me or a wunderkind like you?' It was for the best. I was good at inventing. I was never good at selling."

## **A BUMPY START**

By July 2011, when the system was ready to facilitate the first set of patriot duty meetings, almost a million had signed up, and of those, around half confirmed an appointment. In the end, over 400,000 people participated in the first round of meetings, far exceeding Beaudreau's expectations. Although he remained confident it would work, he was also the first to admit that the system he designed was hastily thrown together, and it showed. To his chagrin, this trial run was plagued with problems.

To begin, the meetings did not always go as smoothly as planned. Since the system scheduled them without notifying the restaurants, some groups showed up only to find their meeting place reserved for a private event, while others were packed beyond their capacity with several groups trying to meet at the same time. Most meetings also had at least one person arrive late or not at all, which the software did not handle gracefully. Other flaws in the

meeting application prevented some people from participating. Anyone who did not speak fluent English found the system difficult to use. Plus, since it relied on photos, it was impossible for visually impaired people to vote without assistance.

Then there were the hardware problems. Although the meeting application was designed for tablet computers, many people tried to run it on their mobile phones instead, which made it too small to see easily. Worse, only the most expensive phones were powerful enough to run it properly; the vast majority were not.<sup>145</sup> Mistakes were rampant. A few forgot to bring their computers, and others forgot to charge them fully and ran out of battery power in the middle of the meeting. Still others used their mobile service instead of the restaurant's Wi-Fi and found out the hard way that their service plans were not as "unlimited" as their titles suggested, and were hit with stiff data fees.

Even when participants did everything right, there were still glitches. The meeting software was demanding, so when too many people used it at once, the main servers were overwhelmed and the application became sluggish or stopped working altogether. Unfortunately, this happened frequently, since most groups across the nation agreed to meet in the early evening. Ultimately, this host of technical complications meant that video records of most meetings were choppy, incomplete or missing altogether. Even those that did make it to YouTube were of limited use. While YouTube provided free storage and broadcasting, its interface was not designed to organize tens of thousands of related videos. As a result, the footage of most meetings in the first three rounds were rarely seen by anyone other than the attendees themselves.

Finally, the logistics of the last few rounds of meetings were especially problematic. The first and second rounds were usually scheduled close to home, but after that, the most central location for the group to meet was sometimes two hours away, or even more for residents of Alaska and Hawaii. This did not affect that many participants – the fourth round consisted of just over a hundred – but it placed a costly imposition on the most important people in the process: politically active citizens chosen multiple times over by their peers as potential leaders.

## **SUCCESS**

Despite all these problems, patriot duty was universally hailed as a success. For the most part, participants were understanding about hiccups in this new experiment, and several groups showed considerable resourcefulness in how they adapted. During the first rounds, even though the instructions said to wait only a few minutes for all participants to arrive, most groups waited for half an hour to make sure no stragglers were excluded. Those who arrived late enough to miss the check-in often stayed to take part in the discussion, even though they could not vote or be selected as a leader. One participant invited her group back to her house after they learned the designated restaurant was closed for the night. Another group held its meeting in a parking lot to include a man who could not enter the restaurant due to its lack of a wheelchair ramp.

During the later rounds, most people agreed that the allotted meeting time was insufficient and agreed to talk longer, coming up with their own discussion topics. Later analysis showed that participation actually increased as the rounds progressed, with over 80 percent of those selected in the second round or later making the time to continue

onward, despite the growing cost and inconvenience. To help, hundreds of local Tea Party groups donated funds to pay for travel expenses.

Politicos and psychologists pored over the video footage of the meetings, searching for conclusions to draw from this unprecedented insight into public opinion. Pleasantly absent were the uncivilized brawls predicted by detractors. On the contrary, in their place were intelligent, spirited debates that were far more polite than what appeared on cable news shows. The majority of participants were Tea Party supporters, so it came as no surprise that nearly everyone selected to progress to the second round was a Republican.<sup>146</sup> However, most Democrats who participated described patriot duty as a positive experience, saying they felt welcome and that the Tea Party was more reasonable than they had been led to believe.

The media loved the story. It had drama. It had suspense. It had David and Goliath, with a young entrepreneur standing up to the old guard of American politics. It had Cinderella, with previously low-profile citizens thrust into the limelight. And it came with a slice of apple pie for dessert, as the meetings brought diverse groups of people together while generating business for local restaurants.

Ultimately, through over 25,000 patriot duty meetings over the course of five weeks, participants narrowed a field of nearly half a million citizens down to nine individuals to represent them. In honor of the founders, the sixth and final round was held at Fitzgerald's, the pub that served as the regular meeting place of the Philadelphia Metro Tea Party, where Otto Scholz challenged Ethan Beaudreau to help him come up with a new way to find presidential candidates only a few months earlier.

## A LEADER EMERGES

After two days of deliberation, the finalists unanimously selected Vincent Patros, a lawyer from Cedar Rapids, Iowa. As the country learned more about him over the next few days, it became clear why he rose to the top.

A socially moderate, fiscally conservative Republican, Patros was a remarkable man and no stranger to politics. He had served two terms in the Cedar Rapids City Council and was an active member in several local political groups, including his regional Tea Party chapter. Over the years, he had given generously of both his time and money to his community. He had a loving family, a closet free of skeletons, a Navy Cross and a Purple Heart, and degrees in both economics and law from Northwestern. Even more impressive than his résumé, however, was his presence. A review of the patriot duty meetings he attended showed him taking command by leading discussions, brokering compromises, and mesmerizing his fellow participants with articulate insights on topics for which, having been chosen at random, he couldn't possibly have prepared.

Everyone marveled at how well patriot duty had worked. Everyone but Beaudreau, that is, who again chalked it up to “simple mathematics,” saying:

*One process chooses from a small pool of career politicians. Patriot duty chooses from a large pool of concerned citizens. The latter producing a superior result is unremarkable.*

*Finding the best of anything depends on two variables: The selection method and the size of the sample. Have you read The Wisdom of Crowds? It explains this far better than I can, but in the right conditions, large groups of regular people make better decisions than*

*small groups of experts, and patriot duty meets all four criteria of a “wise crowd.”<sup>147</sup>*

*We have a sound selection method. After that, it’s just a numbers game. The larger the haystack, the sharper the needle the crowd will find in it. People say Patros is “one in a million,” but he’s actually better than that, once you factor in all the people who did not care enough to participate.*

Witnessing their handiwork select such a worthy candidate reinvigorated the Tea Party. Patros was a breath of fresh air in a stagnant political process that had long since left many members feeling frustrated and alienated. Previously, the Tea Party had been fragmented, with support divided between a dozen national figures throughout the previous year, including several minor politicians and two reality television stars. Patros’ keen understanding of economics provided a focal point around which the Tea Party could rally, despite the fact that he was not as conservative on social issues as other candidates were. Most importantly, he had a better chance of winning than the third- and fourth-string choices the Republicans were left with after so many strong frontrunners decided not to throw their hats into the ring.<sup>148</sup>

The chaotic mix of weak GOP candidates helped Patros to stand out of the crowd due to his charismatic personality and the unique nature of his discovery through patriot duty. It also made him a popular target though, a latecomer to a fight that had already turned ugly before he showed up.<sup>149</sup> Patros had neither a personal fortune nor years of fundraising behind him, and he was up against experienced politicians backed by donors with deep pockets. Attack ads blanketed the airwaves, criticizing his lack of experience and his breaks from traditional

conservative views. Despite his meager war chest, though, no amount of paid advertising could have outshone the promotion the news media gave him free-of-charge.

His late entry was a godsend to the reporters stuck covering a stale race, who capitalized on his grassroots beginnings to tell a compelling narrative. He was Vince “Patriot” Patros, the people’s choice, an underdog competing against the political establishment. News outlets made daily headlines about him as well as the local Tea Party groups that had mobilized across the country to collect the signatures needed to get him on the ballot. He was a media darling, even among liberals. In fact, the adjective journalists used most often to describe him was “presidential.”

An article in the *Washington Times* reported:

*In an impressive display of self-governance, the Tea Party discovered among their rank-and-file members the right’s best chance at winning the White House ... [Patros] is articulate and intelligent, confident without being cocky, passionate while keeping a level head, witty, charming ... a living model of a picture-perfect president.*

An interviewer from *The New Yorker* wrote:

*Larger than life, he seemed more like an actor in a screenplay than a lawyer from Iowa. I recognized his character from dozens of books and movies – he is the everyman hero, the ideal citizen, reluctantly stepping forward when the nation needs him most. If this were a film, he would be a method actor who has been preparing for the role of President his entire life. However, make no mistake: Vincent Patros is very real, much to the dismay of everyone else trying out for the part next November.*

## POLITICS, BUT NOT AS USUAL

Between support from the Tea Party and the media, as well as a boost from the influential caucus of his home state of Iowa, Vincent Patros, the populist Beltway outsider, narrowly secured the Republican nomination. Immediately, donations started pouring in. He was no longer limited by a shoestring budget, but lacking the early start and extensive fundraising network of more experienced candidates, he knew he could raise only a fraction of the amount his opponent could. Nevertheless, he pressed on, making the best of his position. In a stunning first move, Patros, a longtime proponent of campaign finance reform, used his acceptance speech to publicly challenge Barack Obama to join him in limiting their campaign spending:

*President Obama, campaign spending is out of control, and it is hurting America. Campaign budgets have roughly doubled each election since 2000. In 2008, you spent over twice as much as John McCain. Together, you two spent over a billion dollars given to you by hardworking Americans.<sup>150</sup>*

*I don't want to do that. I don't want to waste my supporters' hard-earned dollars slinging mud at you. It's a cold war arms race. You run one attack ad, so I have to run two, and the only people who win are the television networks.*

*So let's keep it civil. If neither of us runs negative ads, we can save the American people a lot of money. We don't need to waste a billion dollars. Clinton and Bush Sr. won with about \$100 million each, and that wasn't that long ago.<sup>151</sup> You have more than that already. If we agree to cap our spending at \$100 million, you could stop fundraising right now and get back to running the country and campaigning.*



*President Obama, you say you want to clean up campaigns. I am offering you a chance to prove you mean it and a chance to show the taxpayers that you know how to manage a budget. Let's spend less time fundraising and more time meeting our constituents and talking about the issues. Let's make the winner of this election the best candidate, not the one who spent the most money. We can't wait for Congress to fix this, and we don't need a law passed to know this is the right thing to do. We can fix this, you and I, right here, right now. President Obama, are you up to the challenge?*

Patros went on to point out that reducing advertising expenditures would benefit Obama more, since, as a sitting president, he was already world-famous and made news with every word he spoke, while Patros was still relatively unknown. In addition to limiting spending and avoiding negative advertising, he also asked Obama to join him in making the campaign process fully transparent by releasing publicly audited financial statements.

His heavy-handed gambit paid off. Obama was forced to either accept the challenge or else appear weak and hypocritical. A masterstroke, Patros' bold opening salvo simultaneously leveled the playing field and set the tone of the election, all while communicating his platform of using common sense to eliminate wasteful spending. Obama met with Patros the next day to iron out the details, ending with a handshake agreement that marked the start of the most pleasant election year anyone could remember.

The younger readers may not know this, but before 2012, elections were nasty, depressing affairs. Television and radio programming was cut short to make room for a deluge of political messages, with many commercial breaks

consisting of nothing but attack ads. Candidates would not even call each other by name, referring to them only as “my opponent.” These practices all but ended with Patros’ challenge to Obama. Throughout their campaigns, both candidates stood by their word. They maintained public financial records, and each spent just under the cap they agreed upon. Negative ads were almost unseen, with only a few run by independent organizations, which the candidates denounced.

Obama and Patros treated each other like respected opponents, not enemies. They were beyond civil to each other; they were polite, downright friendly at times, even while debating controversial issues. Patros hammered Obama for the sluggish American economy and his failure to balance the budget, while Obama criticized Patros for his lack of experience and knowledge of foreign affairs, but their arguments never became ugly or strayed from the issues. They even played golf together three times before the election, once the day after a debate. Their mutual respect confounded pundits, robbing them of their go-to tactic of demonizing political figures, forcing them to change the way they covered the election.

## **WALL STREET, OCCUPIED**

While the Tea Party was busy redefining presidential politics, another completely separate revolution was already underway. In July 2011, the publishers of *Adbusters*, a non-profit anti-consumerism magazine, called for action against “the greatest corrupter of our democracy: Wall Street, the financial Gomorrah of America.” Specifically, they said:

*On September 17, we want to see 20,000 people flood into lower Manhattan, set up tents, kitchens, peaceful barricades and occupy Wall Street for a few months. Once there, we shall incessantly repeat one simple demand in a plurality of voices.<sup>152</sup>*

Twenty thousand people may not have shown up that first day,<sup>153</sup> but it was only the beginning of what became a worldwide movement. A month later, tens of thousands of Occupiers, as they became known, attended protests in over 900 cities across the globe.<sup>154</sup> Their primary complaint: unequal wealth distribution. Demonstrators everywhere united under the slogan “We Are the 99%,” a reference to the fact that the richest 1 percent own approximately 40 percent of the world’s wealth.<sup>155</sup>

In the United States, Occupiers tended to be young, largely because when the Great Recession shrank the American labor market,<sup>156</sup> it hit workers under 25 hardest of all. In fact, summer employment among young people had just reached the lowest level in the country’s recorded history when the movement started.<sup>157</sup>

A large portion of the protestors were recent college graduates who were upset because they took on massive student loans but couldn’t find jobs to pay them back.<sup>158</sup> Even after adjusting for inflation, they had paid three to four times as much for their degrees as their parents had.<sup>159</sup> Yet of those who were employed, only half could find a job that even required a college education.<sup>160</sup> At their side were young military veterans, who were unemployed at a rate four times higher than their older counterparts.<sup>161</sup>

These economic conditions fueled animosity toward the older generations, who had taught them all their lives that earning a college degree or joining the armed forces would

guarantee them a career in the private sector. Much of this anger was misdirected, though, because that idea had been more or less true up until the economic collapse. Furthermore, senior citizens were not taking their retail jobs<sup>162</sup> to fulfill a lifelong dream of working at the mall, but rather because their retirement plans had gone up in smoke with the rest of the economy.

Not all supporters of the movement were young and unemployed, however. Some were previous homeowners who were furious at being foreclosed upon by banks who received billions in bailouts, while others were citizens concerned about the shutdown of social services due to budget cutbacks.<sup>163</sup> Still others were just regular folks who thought it was wrong that the nation's most profitable corporations were paying little or no income tax,<sup>164</sup> and that the middle class had to pay higher tax rates than the mega-rich.<sup>165</sup> Not everyone who felt this way were victims of the economic downturn, either. The downtrodden were joined by socially conscious millionaire and billionaire investors, seven out of ten of whom supported increasing taxes on people earning more than a million dollars a year.<sup>166</sup>

The Occupy movement drew a diverse crowd from all walks of life, and while their frustration was clear, as a group their goals were not. *Adbusters* had compared their idea to the Tahrir Square protests, when a quarter million Egyptians gathered earlier that year to demand their president step down.<sup>167</sup> In the message that organized the first protest, they had asked supporters to help determine a single, unifying objective:

*Tahrir succeeded in large part because the people of Egypt made a straightforward ultimatum – that*

*Mubarak must go – over and over again until they won. Following this model, what is our equally uncomplicated demand?*<sup>168</sup>

However, no such goal emerged, and the movement's lack of organization became a focal point of media coverage.<sup>169</sup> Advocates argued that this was because the Occupiers wanted dozens of changes, and not all of them would fit neatly into a five-second sound bite,<sup>170</sup> but this still left the movement without a clear, cohesive message. Furthermore, identifying a figurehead was all but impossible. When the mayor of Denver insisted that local protestors name a leader to represent them, they officially elected a border collie.<sup>171</sup> Nevertheless, most people who were familiar with the movement supported it, but about two out of three said they did not know enough to even form an opinion.<sup>172</sup>

## **KINDRED SPIRITS**

Neither group would admit it, but to outside observers, there were a startling number of similarities between Occupy Wall Street and the Tea Party. To begin, both groups were born out of deep dissatisfaction with those in power, specifically for their fiscal irresponsibility. Furthermore, they were also both furious at the government for using taxpayer dollars to bail out bank executives, the very people they felt were responsible for causing the world's economic crisis.<sup>173</sup>

Impartial coverage on either group was scarce, because both movements were supported by one arm of the media and ridiculed by the other. Whereas the Tea Party was pigeonholed as a group of cantankerous old coots by liberal media organizations, the conservative outlets painted the

Occupiers as a bunch of whiny young anarchists. Regardless, both groups felt they represented the “real” America and dismissed the other as a fringe element, although in reality they both had roughly the same level of public support.<sup>174</sup> Ultimately, both groups were upset over their lack of representation in policy decisions and were desperate for strong leaders.

This too ended up working to Patros’ advantage. Whereas most Republicans denounced the Occupy movement, Patros frequently broke ranks with his fellow conservatives to support the Occupiers during press conferences and debates. He raised the profile of their concerns, using his economic expertise to express them in clear, rational terms, and he discussed realistic solutions that appealed to both red and blue states. His continuing sympathy legitimized their cause, even as protests began to dwindle due to the difficulty of staging prolonged outdoor gatherings in the winter.

While Occupiers tended to be young and liberal, Patros nevertheless embodied many of the movement’s ideals. He was a political outsider, a regular citizen competing against the establishment. Plus, as his campaign was quick to point out, if elected, he would become one of the only people in Washington to have gotten there without taking donations from big banks. By operating outside the confines of normal two-party politics, Patros was able to gain the support of a rival group without alienating his base.

## **THE PEOPLE’S CHOICE**

It was a perfect political storm. It included a charismatic dark horse candidate, an incumbent president presiding over an economy in shambles, and not one, but two large

populist movements clamoring for change. When Election Day came, most Democrats and Republicans voted along party lines, as would be expected, and votes among Independents were split. However, just as black voters turned out in record numbers in 2008 to help elect the first African American president,<sup>175</sup> so did Latino voters turn out in 2012 to help elect the first Mexican American president. In addition, an unusual number of younger voters turned out, and even more uncharacteristically, they voted Republican. Exit polls showed a large segment of people who typically supported Democrats had instead voted for Patros, effectively handing him the election.

It was not a bitter defeat for the Democratic Party, though, nor did it inspire the partisan anger of so many elections in the past. The two candidates' good-natured rivalry gave hope for collaboration and progress. Even Obama was in good spirits as he gave his concession speech, and he ended with kind words:

*My fellow Americans, I have gotten to know Mr. Patros very well this year, and there is no Republican whom I would rather take my place in the White House. Although we have different perspectives on many issues, I will leave this office confident that the country will be in the hands of a capable leader who truly cares about people. Vincent Patros, I congratulate you on your victory, I salute you as an opponent and as an American, and I wish you the best of luck.*

Patros was indeed capable. He was able to parlay the cooperative spirit of his campaign into the bipartisan support needed to break through decades of gridlock over financial reform in Congress. As such, he enjoyed high approval ratings while overseeing the beginning of two decades of economic recovery. However, his real legacy

was established before he even took office. With a single speech, Patros created the modern tradition of negotiated budget caps and effected massive campaign reform, all without changing a single law or ever holding an office beyond his local city council. Every presidential campaign since has begun with a handshake agreement to limit spending, keep discourse civil, and avoid negative ads, and each year more state and regional candidates follow suit. Patros did not just reform the way campaigns are financed, but fundamentally improved the manner in which they are conducted.

Perhaps most important, though, was Patros' impact on how we think about the presidency. The 2012 election marked the end of a dark and dangerous time in politics, as Americans started looking to extraordinarily qualified citizens instead of entrenched politicians and reality television stars to find their leaders.

## **POLISHING THE PROCESS**

The Tea Party's first electoral experiment identified a supremely competent individual, one who was able to unseat an incumbent president. This alone was proof that their concept of progressive selection could not be ignored. However, the system had several shortcomings. Fortunately, the election of Vincent Patros brought together a wide variety of people, making them feel more connected to the political process and inspiring them to help solve patriot duty's many problems before the next election.



## OCCUPIERS SQUASH THE BUGS

First, the software Ethan Beaudreau developed had a host of technical problems. Rather than attempt to fix them all himself, though, he released his source code to the public and invited volunteers to help improve it.

Fortunately, transparency was a concept held sacred not only in the open source development community,<sup>176</sup> but also in the Occupy movement. Occupiers had been searching for a common goal, and contributing to patriot duty gave them a meaningful way to participate by helping to make the political process more open. (The fact that they could participate without sitting outside in the cold was an added bonus.) Just as protestors across the country had coordinated via Twitter using the #OccupyWallStreet hashtag, so did a team of hundreds of skilled volunteers assemble rapidly around the #OccupyPatriotDuty project.<sup>177</sup> Many of them were the overeducated and underemployed students at the heart of the movement, who organized themselves into smaller subgroups that were typically led by more experienced professionals. Over the next few years, thousands of volunteers donated over a million hours of work, transforming the patriot duty applications from bare bones prototypes into industrial-strength powerhouses.

Security experts patched weaknesses, improving privacy and fraud prevention. Native speakers translated voice and text prompts into every major language in the world. Mobile application developers ensured everything worked on a wide range of devices, while accessibility experts ensured people with disabilities were able to participate in every step of the process.

The team also completely overhauled the way meetings are arranged. The old system sent groups to restaurants chosen by an algorithm without notifying the managers or even asking whether they wanted meetings to be held there. Under the new system, anyone who managed a business or public building could register their facility as a patriot duty meeting place by providing details such as amenities, hours, and capacity. A week before each meeting, participants received an email asking them to choose from a list of potential locations. Forty-eight hours later, the system sent a final email, confirming the meeting at the place picked by the most members of the group. The managers of those locations were also notified, and could view a calendar of all patriot duty meetings scheduled to take place at their establishments.

While restaurants still accounted for most of the initial registrations, any building with a dozen chairs and Wi-Fi internet could qualify. Bookstores, coffee shops, hotels, public libraries, community centers, schools, churches, country clubs, even bowling alleys and wineries and yoga studios signed up, eager to bring in new customers or simply to help out. The tire retailer Michelin even ran a national patriot duty promotional campaign, announcing it would set up meeting spaces in their showrooms after hours, serving free drinks and refreshments.

## **APPLE SUPPLIES THE FIREPOWER**

No other company, however, did more to promote patriot duty than Apple.

To begin, vast amounts of raw computing power were required to make sure all the patriot duty meetings taking place at once ran smoothly. Maintaining a fleet of servers

would not only have been expensive, but also inefficient, since they would be needed for just two months every four years, and even then, most activity would be concentrated during the evening hours of the first week. However, the Tea Party's needs were a perfect fit for Apple's *iCloud* platform, which automatically scales to accommodate usage spikes without interruption. Apple had recently expanded *iCloud* to include computing as well as storage, making it similar to Amazon's *EC2* platform. Apple hosted the patriot duty applications on *iCloud* free of charge, completely eliminating the back end bottleneck.

However, they didn't stop there. Apple's development team also designed a custom video management system to organize the millions of hours of patriot duty meeting footage, a task which required massive amounts of storage and bandwidth. By comparison, at the time, this was as much video as was added to YouTube in three months, except in the case of patriot duty, most of it would be uploaded during the first week.<sup>178</sup> Apple's engineers rose to the challenge, however, and made a system that handled the strain without a hitch, and even included automatic audio transcription and indexing to allow people to search through the footage more easily. Furthermore, they made a user interface that allowed anyone to start by viewing their own meeting, then follow the winners of each successive round, putting every video within a few clicks of the final candidate. Altogether, Apple provided data services worth tens of millions.<sup>179</sup>

As if that weren't enough, Tim Cook took a personal interest in the project and decided to take aim at some of the toughest problems. First, he wanted to convince a large number of businesses to open their doors for patriot duty

to ensure a wide range of convenient meeting places. At the same time, he also wanted to make it so no one tried to run a patriot duty meeting on an underpowered mobile phone ever again. Killing two birds with one giveaway, Cook personally offered to send two free *iPad 7* tablet computers to any business in America that registered to host patriot duty meetings, provided they supply wireless internet access and allow participants to use the tablets to conduct them. Nearly a quarter of a million businesses took Cook up on his generous offer, a move that cost him over \$150 million.<sup>180</sup>

Apple's tablet quickly became the center of attention, largely because it ran the patriot duty application better than any other device on the market. The *iPad 7* worked directly with *iCloud*, offloading much of the work to the cloud computing network, making its speed seem like science fiction compared to the painfully slow experience that other handheld devices delivered.<sup>181</sup> Between Occupiers and Apple improving the architecture and Cook ensuring a widespread availability of meeting places with high-powered mobile devices, essentially all major technical problems of the patriot duty process were eliminated.

## THE TEA PARTY TACKLES LOGISTICS

Next came the problem of getting the winners of each round to their next meeting. It was not an issue of motivating people to want to go. Being chosen by one's peers to represent them was flattering and stirred a deep sense of responsibility. Plus, there was always a glimmer of a chance of becoming president. It was not even an issue of getting time off work. In 2011, one national retailer fired an employee for not showing up after she was denied time off

to attend the third round of meetings. She told her story to the press, inciting a consumer boycott and warning all employers of the public backlash they would face if they prevented citizens from performing their civic duty.

The real issue was travel expenses. The problem was inevitable: Each consecutive round would almost always require participants to meet farther and farther from home. At some point, the cost and inconvenience would prevent some from attending. Granted, this would affect only a tiny percentage – only about three out of every 100,000 participants would progress past the fourth round<sup>182</sup> – but it was unfair. It penalized people chosen to represent their fellow citizens and disproportionately affected those living in sparsely populated or remote areas, particularly Alaska and Hawaii.

Beaudreau proposed building an internet videoconferencing system, but Scholz argued that no matter how good it was, nothing could compare with meeting in person. Meckler's solution was simpler: Ask Tea Party groups to raise funds to pay for local participants' travel expenses. Except for a couple of prominent organizations funded by billionaires, though, most of the thousands of Tea Party groups across America focused on grassroots activities and had very little money or fundraising experience. According to one poll, most groups had less than \$500 on hand in 2010, and virtually all their funding came from local individuals.<sup>183</sup>

Nevertheless, the Tea Party admirably rose to the challenge. Volunteers turned out in force to solicit donations, whether over the phone, at community events, or from card tables outside grocery stores. To their surprise, raising funds turned out to be pleasantly easy. As

it turned out, many Americans had no qualms about giving a little to help improve their government; they had just been jaded by how political donations had been used in past election years. For instance, since all that mattered were electoral votes, presidential candidates would ignore most of the country in order to focus on battleground states. Money raised on the West Coast would be shipped off to finance a smear campaign in Florida, making the 5 million Republicans in California<sup>184</sup> feel as irrelevant as the 4 million Democrats in Texas.<sup>185</sup>

But donating to support patriot duty was different. Money raised locally was spent locally. It didn't go toward advertising or even to promote a specific candidate. Instead, it helped people's neighbors represent them in a national political process – a grown-up version of sending the hometown high school football team to the state championships.

Donations poured in from ordinary citizens all over the country. Anyone asked to travel over 30 miles to attend a patriot duty meeting was put in contact with the closest participating Tea Party group to arrange for financial assistance. Since, again, there was no central management, each local group handled this differently. Some paid travel costs up front, some reimbursed afterward, some replaced lost wages and paid for childcare, and some simply gave a fixed stipend. As a whole, however, their efforts went a long way toward easing the financial burden of participating in the later rounds.

## **COOK LEADS THE DISCUSSION**

For his part, Tim Cook did much more than donate half a million *iPad* 7 tablets. He also turned his attention to the

difficult task of improving the database of patriot duty discussion questions. The hardest part, he said, was making sure they were balanced enough to promote useful discussion among random groups of strangers, which would get trickier as the pool of participants grew larger and more diverse.

While the topics prepared by students the first year provided a good start, Cook insisted that the only way the system could truly be fair would be to include input from everyone: Democrats, Republicans, corporations, individuals, political action groups – anyone who wanted to contribute. However, any discussion among that many different people was destined to be disorganized. Cook theorized that in order to be able to extract coherent information from the chaos, they needed to invent something that would perform three specific functions: It needed to define political positions, determine their popularity, and analyze their validity. To that end, Cook invited Otto Scholz to join him and Apple’s world-famous team of developers to help design a solution.

### **THE CONCEPTUAL PRISM**

The first challenge was to create a system that clearly identified political positions and presented them in a logical, consistent format. Scholz recalls how he explained how it needed to differ from the status quo:

*Unscrupulous people try to reduce every issue down to a black-and-white choice. “You’re either for us or against us,” they say. The media does this. The Democrats and the Republicans do this. But most issues are not that simple. Most people’s opinions are not pure black or white, or pure red or blue, but some other color altogether.*

*On TV, they only show two colors, and this is a problem. They show the red idea, which benefits the people who got the Republican elected, and the blue idea, which benefits the people who got the Democrat elected. Then they pretend that the only alternatives are the shades of purple between these two bad ideas. But that is a lie. Some of the best ideas are orange or green. Those ideas need to be seen too.*

Borrowing a metaphor from Scholz' field of optics, Cook and his team set out to create a "conceptual prism:" a device that would separate and identify the rainbow of various ideas that exist between extreme positions on an issue. This invention needed to have the capacity to document everyone's perspective on every issue, yet still present this information in a useful manner. Using these goals as the foundation, the design geniuses at Apple did what they do best – namely, making the complex simple and the impossible possible – and brought this theoretical machine from imagination into reality.

In 2013, Apple handed the result of their labor over to a group of Occupy and Tea Party volunteers, headed by Ethan Beaudreau. With it, they established the Public Record of Political Positions ([prpp.org](http://prpp.org)), which to this day works in much the same manner as when it was first introduced.

At the heart of the PRPP system is a wiki: a website that encourages collaboration by allowing anyone to add or edit content. Like the most famous wiki, Wikipedia, the PRPP is a popular reference site that is free to use and has no advertising. However, while Wikipedia's goal is to document objective facts, the PRPP exists to document opinions. Whereas Wikipedia strives to maintain a neutral



point of view, the PRPP is a collection of millions of points of view, most of which are anything but neutral.

PRPP members can participate in three ways: writing positions, supporting or opposing other positions, and checking the accuracy of factual statements. First, people can participate by writing a position on any issue. All positions are presented in the site’s signature format, which contains the following three elements: Background, Position, and Support.

Illustration: PRPP slide format

The screenshot shows the website 'THE PUBLIC RECORD OF POLITICAL POSITIONS'. The navigation menu includes 'Positions', 'People', 'ACR Review', 'About', and 'Contact'. An 'Upcoming Event' banner mentions a 'live debate' at 7:30 pm PST. A secondary menu has 'Recent Activity', 'Post a Position', 'Top Positions', 'My Positions', and 'Discussion'. The breadcrumb trail is 'Home > About > Slide Format'. The main content area displays three sections: 'Background' (relevant facts), 'Position' (short statement), and 'Support' (logical basis).

THE  
**PUBLIC RECORD**  
OF POLITICAL POSITIONS

Positions People ACR Review About Contact

*Upcoming Event:* Join us at 7:30 pm PST for a [live debate](#) about the future role of entitlement programs.

Recent Activity Post a Position Top Positions My Positions Discussion

Home > About > Slide Format

**Background**

Relevant facts explaining the context of the position.

**Position**

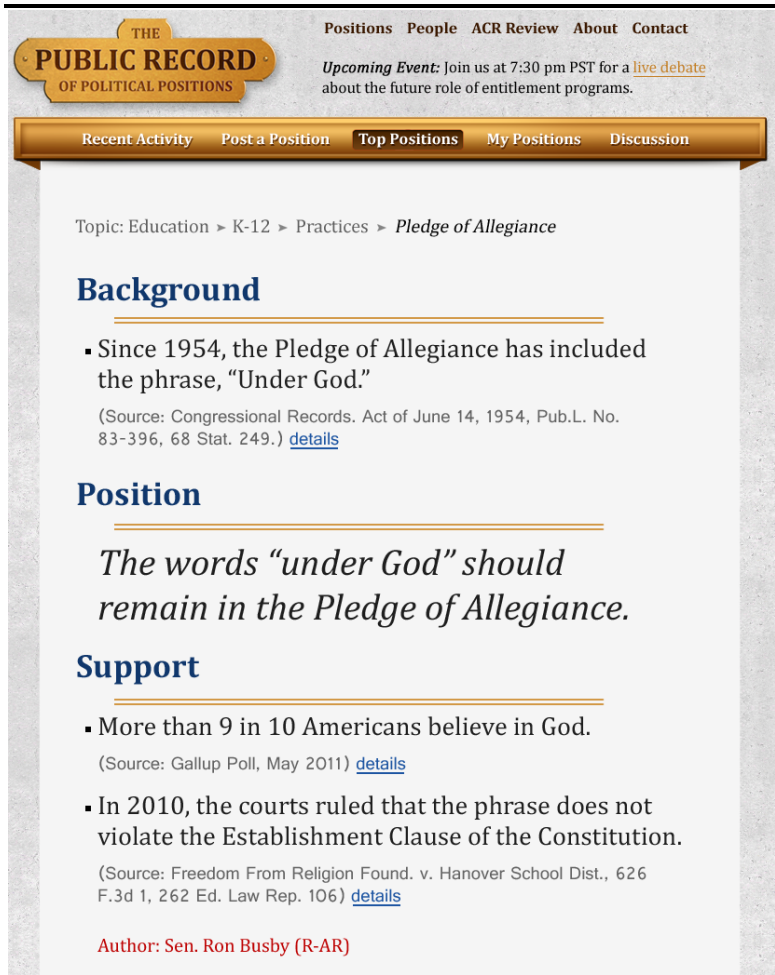
A short, simple statement of opinion.

**Support**

Logical basis for the position.

Taking cues from popular presentation software, each discrete idea is presented as a bullet point, with the list of bullet points known colloquially as a “slide.” (As such, the PRPP is often called, tongue-in-cheek, the Public Repository of Power Points.)

Illustration: Example slide #1



THE  
**PUBLIC RECORD**  
OF POLITICAL POSITIONS

Positions People ACR Review About Contact

*Upcoming Event:* Join us at 7:30 pm PST for a [live debate](#) about the future role of entitlement programs.

Recent Activity Post a Position **Top Positions** My Positions Discussion

Topic: Education > K-12 > Practices > *Pledge of Allegiance*

## Background

- Since 1954, the Pledge of Allegiance has included the phrase, “Under God.”  
(Source: Congressional Records. Act of June 14, 1954, Pub.L. No. 83-396, 68 Stat. 249.) [details](#)

## Position

*The words “under God” should remain in the Pledge of Allegiance.*

## Support

- More than 9 in 10 Americans believe in God.  
(Source: Gallup Poll, May 2011) [details](#)
- In 2010, the courts ruled that the phrase does not violate the Establishment Clause of the Constitution.  
(Source: Freedom From Religion Found. v. Hanover School Dist., 626 F.3d 1, 262 Ed. Law Rep. 106) [details](#)

Author: Sen. Ron Busby (R-AR)

Illustration: Example slide #2

The screenshot shows a website header with the title "THE PUBLIC RECORD OF POLITICAL POSITIONS" in a stylized orange and white logo. To the right of the logo is a navigation menu with links for "Positions", "People", "ACR Review", "About", and "Contact". Below the navigation menu is a banner for an "Upcoming Event" at 7:30 pm PST for a "live debate" about the future role of entitlement programs. A secondary navigation bar below the banner contains links for "Recent Activity", "Post a Position", "Top Positions" (which is highlighted), "My Positions", and "Discussion". The main content area has a breadcrumb trail: "Topic: Education > K-12 > Funding > Federal > Gifted Education". The content is organized into three sections: "Background", "Position", and "Support", each with a blue heading and a double-line underline. The "Background" section contains two bullet points with source citations and "details" links. The "Position" section features a bold, italicized statement: "Congress should increase federal funding for gifted education." The "Support" section contains two bullet points with source citations and "details" links. At the bottom of the content area, the author is identified as "Rep. Christine Hatchette (D-OR)".

THE  
**PUBLIC RECORD**  
OF POLITICAL POSITIONS

Positions People ACR Review About Contact

*Upcoming Event:* Join us at 7:30 pm PST for a [live debate](#) about the future role of entitlement programs.

Recent Activity Post a Position **Top Positions** My Positions Discussion

Topic: Education > K-12 > Funding > Federal > *Gifted Education*

## Background

- Federal funding for gifted education represents .01% of the education budget.  
(Source: Federal Budget, FY 2014) [details](#)
- The US spends less on gifted education than any other industrialized country.  
(Source: Dept. of Education Budget Overview, 2014) [details](#)

## Position

*Congress should increase federal funding for gifted education.*

## Support

- A standard curriculum is as ineffective for gifted students as it is for special education students.  
(Source: N. Colangelo, G. Davis. (2003) Handbook of Gifted Education.) [details](#)
- Without a challenging curriculum, gifted students often perform poorly and get into trouble.  
(Source: J. Renzulli, S. Park. (2000) "Gifted Dropouts: The Who and the Why." Gifted Child Quarterly. Vol. 44, No. 261.) [details](#)

*Author: Rep. Christine Hatchette (D-OR)*

## THE PUBLIC'S OPINION

Alternatively, instead of creating their own slides, members can voice their support for, or opposition to, opinions written by others. At the bottom of each slide, members are invited to evaluate the position presented above.

Illustration: Position rating questions

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Do you agree with this position statement?

**YES**  I completely agree  
 I mostly agree  
 I somewhat agree  
 I neither agree nor disagree  
 I somewhat disagree  
 I mostly disagree

**NO**  I completely disagree

Please rate the presentation of this position:

Excellent (Clear and succinct)  
 Good  
 Fair (Average; could use improvement)  
 Poor  
 Bad (Incoherent; should be removed)

Comment:

(Limit 140 chars. If you wish to write more, consider writing your own position.)

---

The most popular and best-written opinions are turned into discussion questions for the patriot duty meetings, fulfilling the original purpose of the project. However, the ratings are also useful in a host of other ways. Each individual's answers collectively form a profile of his or her unique perspective. Many keep these profiles private, but

others use them to share their beliefs in an organized fashion. Essentially all elected officials, political candidates, political action groups, and socially conscious companies maintain public profiles to communicate and promote their points of view.

Also, thanks to the power of Apple's *iCloud* platform, anyone can perform complex analysis instantly. Individuals can compare their profiles to others, or compare any two public profiles, immediately highlighting where they agree and disagree. After people rate enough positions, the site can accurately predict new topics that would be of interest to them, as well as show them a list of political figures who most closely share their particular ideology. Instead of settling for politicians they don't really like, the PRPP can match voters with candidates who actually share their point of view on the topics that matter most.

Furthermore, when people see something they do not like on a slide, they can do more than just give it a low rating: They can challenge it. The PRPP community polices itself to maintain quality and consistency. Writers are encouraged to use clear, plain language, and members quickly flag any vague or excessively rhetorical wording for the writer to revise. If a slide gets too long or contains too many concepts, members can recommend it to be split into multiple slides. Through this process, complex opinions are broken down into simpler parts that are easy to share and analyze.

Subjective errors of style or clarity are typically remedied without incident. However, objectively false statements are a more serious offense. Background and support information is supposed to be limited to verifiable evidence

from authoritative, unbiased sources. Members can flag anything that looks questionable for review, and when enough people challenge a statement, it gets sent through “The Grinder.”

### **INSIDE THE DATA FACTORY**

“The Grinder” is the nickname for the site’s crowdsourced fact-checking process. (It should be noted that it is not, nor ever has been, officially called “The Grinder.” Its actual title is the “ACR Review” – named for accuracy, credibility, and relevance – but no one ever calls it that.)

The number of people required to flag a statement in order to send it through this process depends upon the popularity of the topic and the past credibility of the author. A senator’s claim about a controversial issue might not be reviewed until thousands of people flag it, whereas facts put forth by a county commissioner about local zoning practices could get reviewed the first time a single person questions them. Once this threshold is met, the statement is colored gray and marked as “under review,” an innocuous term that masks the ferocity of the war raging a mere click away.

At the outset, the site notifies all interested parties that the statement has come under review. What happens next is brutal. Members dissect the statement and examine each word from every imaginable angle. They double-check every calculation, question every credential, and investigate every source. If they find anything to be false, they search for evidence that the writer knew it to be false.

However, for all its ruthlessness, this battle is fought within a strict code of conduct. The Grinder is not a free-for-all chat room. Each review is a structured conversation

with a singular purpose: to determine the validity of a claim. Any statements that do not advance the discussion toward the goal of finding the truth are moderated down and hidden by other members, often within minutes. This includes off-topic comments, illogical arguments, vulgar or incendiary language, personal attacks, sarcastic remarks, jokes, discredited or unsubstantiated claims, and incoherent or poorly written statements.


This rigid structure results in a peculiar, emotionless conversation that one commentator described as “a room full of computers talking to each other.” Another noted, “It’s the only message board on the internet where, if you took out all the gay jokes, ‘n-words,’ and lines that just said ‘LOL,’ you wouldn’t be left with a blank page.” Indeed, all those distractions are absent in The Grinder, and what remains is an intensely focused debate.

During the review, the group evaluates the statement by assigning it separate scores between one and five for accuracy, credibility, and relevance.<sup>186</sup> When the community reaches consensus, the discussion is archived and the findings are summarized on the slide next to the statement, along with a color-coded badge that corresponds to that particular score combination. Only statements that receive a score of four or five across all criteria receive badges in shades of green; all other colors indicate that the statement is fundamentally flawed.

Illustration: Findings summaries

<span style="background-color: #76b82a; color: white; padding: 2px 5px; border-radius: 3px;">✓ MOSTLY TRUE</span>			<span style="background-color: #d35400; color: white; padding: 2px 5px; border-radius: 3px;">✗ MISLEADING</span>		
4	5	5	5	5	2
Accuracy	Credibility	Relevance	Accuracy	Credibility	Relevance

Illustration: Example of discourse from the Grinder




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*Upcoming Event:* Join us at 7:30 pm PST for a [live debate](#) about the future role of entitlement programs.

[Recent Activity](#) [Post a Position](#) [Top Positions](#) [My Positions](#) [Discussion](#)


### TOPIC: Phrase #4 inaccurate. Mean != Average.



**Justin Braeger** posted at 10:45 pm on 09/16/14:  
*Accuracy: 2    Credibility: 5    Relevance: 4*

Phrase #4: "the average wage" is inaccurate. A review of the referred study shows Data Point #2 to be the median, whereas "the average" refers to a numerical mean. The actual average is higher.

11 responses hidden [+]




**Sima Felani** posted at 10:59 pm on 09/16/14:  
*Accuracy: 5    Credibility: 5    Relevance: 5*

The average cannot be higher. It is a statistical impossibility for more than half to be "above average. In any set, half of the values are above-average and half are below-average.

8 responses hidden [+]


**13 similar responses, top-rated response shown below:**



**Eva Balash** posted at 11:09 pm on 09/16/14:  
*Accuracy: 2    Credibility: 5    Relevance: 4*

That statement only applies to sets of subjective analyses and sets with Gaussian distribution and no duplicate values. It does not apply to all types of sets, particularly those of all integers with many repeated values. Consider this example: Everyone has either zero, one, or two arms, but the average number is slightly under two. Most people have two arms, so most people have an above-average number of arms."

217 responses hidden [+]



**Elijah Morrison** posted at 12:16 am on 09/17/14:  
*Accuracy: 4    Credibility: 5    Relevance: 5*

Your point is correct and your explanation is almost correct, but both are irrelevant. Phrase #4 is technically inaccurate, but changing Data Point #2 to the average instead of the mean does not affect the argument since it still leads to the same logical conclusion.



According to Otto Scholz, The Grinder turns the PRPP community into a “massive debunking machine.” In fact, he was the one to coin its nickname. Proud of his German heritage, he delightedly explained the origin in an interview:

*All my life I have built machines that help people see more clearly. What we seek here is the truth. This wonderful machine finds it.*

*Another Otto, much more famous than me, once said, “Laws are like sausages, it is better not to see them being made.”*

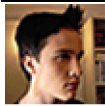
*It is the same way with truth. Here, truth is a sausage made of words, and this is the grinder. The machine crushes ideas, splitting them up into tiny bits. If something is true, it passes through unchanged, but now everyone knows it is true. If not, we can separate out the good parts, get rid of the junk, and we end up with something useful. It is not a pretty process, but anyone can watch if they want to, and what comes out of the end is far better than what goes in.*

## THE PUBLIC RECORD

New ideas typically need to catch on quickly if they are to make any difference in the political arena. The year after it was founded, the Tea Party had gained the support of a third of the country<sup>187</sup> and made a huge impact on the 2010 midterm elections. Within a month of the first protest, the Occupy movement had spread to nearly a thousand cities around the world.<sup>188</sup> While both of these movements spread quickly, the growth of the Public Record of Political Positions can only be described as meteoric. Fortunately, Apple once again donated the use of its *iCloud* platform, allowing the PRPP to expand rapidly without interruption.

Within a year of its launch, *prpp.org* became one of the top 30 most visited websites in the world, thanks largely to social networking. The concise format of slides blended seamlessly with several applications. For people who liked to share their opinions, every rating they gave to a position could form a wall post on Facebook, and due to the 140-character limit, every comment they wrote fit perfectly in their Twitter feeds.

Illustration: Facebook wall post from the Public Record



**Anthony Greenwald** completely agrees with the position: "The words 'Under God' should remain in the Pledge of Allegiance." (Position written by **Sen. Ron Busby**.)

June 15 at 10:50 pm · Like · Comment ·

 19 people like this.



**Lacey Pasqual** Amen to that! Keep it the same.  
45 minutes ago · Like

What do you think? Put your opinion on the Public Record.

Well-written positions spread virally, reaching millions. Eager to use this new tool to broadcast their opinions, the world's thought leaders flocked to the PRPP. Fortright politicians expressed their entire platforms in slide format, giving them an instant boost in credibility. When news stories broke, television pundits rushed to present extreme positions, capitalizing on the controversy with free publicity from both supporters and detractors. Editorial writers routinely ended their articles with a reference to a slide that summarized the piece, inviting readers to share their own perspectives. Special interest groups, like the National Rifle Association and the National Organization for Women, spread their values by getting supporters to share their official positions with friends. Corporations

seeking to whitewash their image pandered with uncontroversial positions like “No child should go hungry” and “We need to protect our environment,” and, of course, celebrities chimed in on their own causes *du jour*.

### **FACT-CHECKING AS A SPECTATOR SPORT**

Along with all these positions came a myriad of claims that demanded investigation. Unfortunately, verifying facts was tedious labor and lacked the glory of writing popular positions, as most of the action occurred behind the scenes. Nevertheless, the PRPP’s review community also expanded rapidly. Established online fact-checking organizations PolitiFact and FactCheck.org led the charge, tackling the boldest claims of prominent politicians, just as they had for years. However, they could only handle a tiny fraction of the facts called into question. Luckily, a number of celebrity debunkers helped call attention to The Grinder through their participation.

Jamie Hyneman and Adam Savage, co-hosts of the Emmy-nominated series *MythBusters* on the Discovery Channel, discredited dubious scientific claims made by hundreds of politicians in support of their policies. Penn Jillette and Teller, co-hosts of another Discovery Channel show, *Tell a Lie* (as well as the 11-time Emmy-nominated *Bullsh-t!*), deflated popular beliefs, ranging from the supposed benefits of recycling and gay marriage bans to the overhyped dangers of global warming and genetic engineering. Well-known economists and journalists, like Steven D. Levitt and Stephen J. Dubner, co-authors of *Freakonomics*, as well as Malcolm Gladwell, author of *The Tipping Point*, showed how the truth is sometimes counterintuitive, and exposed sketchy factoids to illustrate how statistics are distorted to support false conclusions.

These intellectual superstars helped elevate fact-checking into a patriotic duty, serving in the war on misinformation. In an interview, Ronald Wasserstein,<sup>189</sup> Executive Director of the American Statistical Association, likened it to the effects Hollywood had on other previously unsung pursuits:

*Before CSI came on the air, not many people cared about the nuts and bolts of forensic science. Now, some forensics jobs get over a thousand applications.<sup>190</sup>*

*With The Grinder, we suddenly have a new generation of people interested in the fine details of statistics, and they can tell you exactly how regression analyses work or how non-contemporaneous control bias can taint a study sample. This is important, because we use statistics every day to shape our beliefs and our laws ... It is vital that we critically examine the procedures used to create statistics so we know when they are being used to inform and when they are being abused to mislead.*

## MEET THE GRINDERS

Between its rigid enforcement of civil discourse and its intolerance for even minor inaccuracies, The Grinder gave rise to a subculture that thrives in its harsh environment. Known amongst themselves as “grinders,” tens of thousands of volunteers spend upwards of 15 hours a week checking sources and debating conclusions with fellow grinders. In the very beginning, much of the fact-checking on the PRPP was done by out-of-work Occupiers and retired members of the Tea Party. However, today most grinders have no stake in the outcome of their work, and only a handful have any ties to political movements.

Who are these people who treat fact-checking like an unpaid second job? “Many of them are working

professionals who are not challenged enough by their careers,” says sociologist Marcia Eldredge in her book *The Cogs in the Machine*. “Fact-checking provides a healthy, socially beneficial outlet for their untapped intellectual capabilities.”

Zachary Gilding, one of the dozens of grinders Eldredge interviewed, described his fellow fact-checkers more bluntly:

*We're nerds... and proud of it. The internet is full of know-it-alls like me. We love to point out when people are wrong. We're the guys you sat next to in high school who kept correcting the history teacher.*

According to Gilding, fact-checking is second nature to them:

*We argue like this all the time. We put in more work debating whether an episode of Doctor Who accurately portrayed the laws of physics. Only here, we know it makes a difference.*

Gilding concluded with a warning:

*We may be a big pack of geeks, but we're a big pack of geeks you don't want to mess with. If we know what you're saying is wrong, even just a little, there is nothing you can do to shut us up. You wave a study in our faces and think that means it's over? It's not. We'll dig up who paid for it and the shady methods they used to get the results they wanted.*

*We understand that sometimes it's hard to tell good data from bad, and that's why we're here to clear it up. After we do, though, if you can't make your case without using bad information, then you should stop talking. Better yet, change what you're saying because you're probably wrong.*

*But if we find out you knew what you were saying was false the whole time? We will bury you. We cannot and will not stand being lied to. We will never, ever, ever give up until you admit the truth.*

Eldredge points out striking similarities with the way the term “grinder” is used in sports. According to Wikipedia:

*In ice hockey, a grinder is a player better known for his hard work and checking than his scoring ... They are often fan favorites due to their work effort ... a style of defensive hockey which is within the rules of the game.<sup>191</sup>*

“Many of them don’t even care much about politics,” explains Eldredge. “They just enjoy showing off how smart they are. It’s a game to them... and an ego stroke. They get to match wits with the world’s elite, and they often win.”

The grinders were indeed a force to be reckoned with, and soon embarrassed politicians had to revise positions when their supporting information was proven faulty. This filled a vital role in society, because what politicians say is easy to swallow, at least for members of the same party, and our human brains will perform great feats of mental gymnastics to keep believing what sounds good to us, regardless of whether it is true.

We start by favoring sources that share our ideology. If we are liberal, we tend to favor news from CNN and NPR a little, and if we are conservative, we prefer information from Fox News by a wide margin, even when the stories have nothing to do with politics.<sup>192</sup> Once there, we can easily identify contradictions spoken by Democrats, unless we are a committed Democrat ourselves, in which case a part the brain responsible for rational reasoning literally shuts off so we can avoid the discomfort of being

intellectually threatened. (And the reverse holds true for Republicans, too.)<sup>193</sup>

We accept arguments that fit our preconceptions about the world without question.<sup>194</sup> If we later find out that what we were told was false, we frequently don't change our minds, but rather believe it even more.<sup>195</sup> In fact, even when presented with scientific proof that we are wrong, sometimes we still don't doubt ourselves. Instead, we start doubting science itself.<sup>196</sup>

Part of this is because we have irrationally positive views about people who are similar to us, and equally irrational negative views about groups outside our own.<sup>197</sup> Collectively, however, the grinders had no such problem. Outside the PRPP, it may have been the Democrats vs. the Republicans, but deep inside the guts of the PRPP, it was the grinders vs. misinformation, and the grinders scrutinized everything with equal fervor, regardless of who said what.

Over the next few years, driven by the grinders' insistence of absolute accuracy, the PRPP achieved an unprecedented reputation for credibility. By 2015, journalists and politicians had stopped calling the PRPP by its formal name, referring to it simply as "the Public Record," an appropriate title for the function in society it had grown to serve.

## **FINALLY, A REAL PUBLIC RECORD**

The phrase fit naturally into political speech. Politicians sprinkled their rhetoric with phrases like "I said on the Public Record that I oppose this tax," and "over a million people have gone on the Public Record to say they agree with me." Actually, they had been saying these things for

ages. However, now it meant they had to tell the truth, because before the PRPP there was no real public record.

### **POLITICIANS HAD TO STAND BY THEIR POSITIONS**

In fact, as hard as it is to imagine today, politicians used to say just about anything they wanted to with little fear of consequences. They would change their attitudes on issues as fast as they could read public opinion polls. Candidates did not even have to state their positions clearly when running for office. Most would hide behind vague terms and weasel words, and it was common practice to scrub campaign websites of controversial opinions when races heated up. If challenged, some would claim their words were taken out of context. Others would simply lie. With no centralized, well-organized, non-partisan archive of political statements, they would usually get away with it.

Today, it is different. Whether they like it or not, everything politicians say ends up on the Public Record. Every public figure's stance on every issue is on display, as well as a timeline that shows how their positions have changed and how they have voted, giving the political arena an organized history, which it previously lacked. The advent of the Public Record finally gave voters a clear picture of what candidates actually stood for, both in their words and in their actions.

This radically affected campaigning and fundraising. Previously, the most successful politicians were social chameleons, changing their colors to appeal to whomever they were with at the moment. They would say anything to win votes or donations, routinely advocating contradictory positions within hours of each other. The Public Record gave donors new leverage, allowing them to base their



contributions on the candidate's open support of their interests. No longer could lawmakers play both sides, giving lip service to labor unions in the morning before making promises to their corporate opponents in the evening. For better or worse, candidates had to establish a set of positions and stand by them.

### **EVERYONE HAD TO STICK TO THE FACTS**

The Public Record also drastically improved the accuracy of the information put forth by public figures. Before there was an organized network of fact-checkers, politicians could cherry-pick research to support any position. Even when a hundred reputable studies refuted their ideas, they would cite the one obscure report that matched the narrative they wanted to tell. If they couldn't find that one study, many politicians would just make up statistics. Lazy journalists had long since abandoned the responsibility of investigating. Instead, they reported anything people said as long as it was interesting without worrying if it was true. Even members of Congress shamelessly brandished discredited research to defend their policies, yet there were no repercussions.

As we all know, things are very different now. Instead of regurgitating every sound bite they are fed, the press now questions new data, especially when so much established information is readily available. Apple's *iCloud* storage is essentially limitless and permanent, which means people have to watch what they say. Public figures are painfully aware that every single claim they make – every report they reference, every statistic they cite, every poll they mention – will end up going through The Grinder.

As a result, most political rhetoric relies on data from United Metrics: a non-partisan research firm that compiles information that has been scrutinized thoroughly on the Public Record. Inside the Beltway, this is known as “ground data,” that is, data that has been through The Grinder enough times to gain popular consensus. Similarly, when experienced politicians want to introduce new information, they now “pre-grind” it. This common tactic involves releasing support material well ahead of a major speech or campaign so they can reference a vetted version of the data from United Metrics. Otherwise, their message can become lost as attention shifts away from their arguments to the accuracy of their supporting information.

### **DEBATES HAD TO OCCUR IN REALITY**

The Public Record changed not only how politicians talk to their constituents, but also how they talk to each other. Political analyst Meredith DeForest explained the way things used to be in the introduction to her 2012 bestseller *Monologues from Demagogues*:

*Debate is dead. Everyone may as well be speaking different languages, because all politicians live in their own private worlds, which they build entirely out of their own “facts.”*

*Ask two politicians, one a Democrat and one a Republican, “Would lowering corporate taxes stimulate the economy?” You will get two different answers, but that is to be expected. You asked for a prediction, and different people are bound to have different opinions.*

*Now ask them, “How many jobs were created or lost in Q1?” You will still get two completely different*

*answers. This is a problem. When asking about a statement of fact, the answers should be the same.*

*It's hard enough to debate policy without having to debate reality. How can we talk about the way things should be if we can't even agree on the way they are?*

Forcing politicians to support their arguments using only data that had gained broad acceptance elevated the nature of political discourse. Democrats and Republicans had to co-exist in the same real world made of actual facts, relying on the strength of their ideas to win their arguments, rather than how far they could twist statistics.<sup>198</sup>

## **A BETTER BAROMETER**

One of the most useful aspects of the Public Record was that it did not just let people broadcast their views, but it also collected feedback. This meant the PRPP was also a public opinion poll of unprecedented breadth, depth, and balance. Combing through these ratings led to some key insights, although not everyone liked what they learned.

## **SPEAKING TRUTH TO POWER**

A leading research firm conducted an analysis of the PRPP in 2015, finding that the two entities that published the most slides were the Republican Party and the Democratic Party. This was no shocking discovery, since representatives from both parties filled the Public Record with their official positions on every issue imaginable. More did not necessarily mean better, though, as further analysis of the data suggested that neither party made the most accurate portrayal of their own members' opinions.

The study found that, of the 200 most popular current political topics, self-described conservatives tended to say

they only “mostly agreed” with the official Republican positions, rather than “completely agreed” with them. The same held true with self-described liberals and the official Democratic positions. Alone, these findings would not have garnered much attention, but the study also revealed two unexpected sources of ideas that were far more popular.

Rather than the Republican Party’s stances on issues, more conservatives said they completely agreed with the positions written by Bill O’Reilly, host of the most popular cable news program, *The O’Reilly Factor* on Fox News Channel. O’Reilly was one of the earliest supporters of the Public Record. Just weeks after its release, he called it a “great advance in modern journalism” and pledged to create a slide with extensive support material for every major point he made on his show “to show the kind of homework that goes into an informed opinion.” (He went on to explain why others in the news industry would not follow him, saying, “They can’t. They don’t do the work.”) A prolific political commentator, O’Reilly often wrote dozens of opinions per week, with most gaining significant support from his viewers.

The Democratic Party was in even worse shape. Rather than their official positions, or even those written by any political figure, liberals agreed more with those of Jon Stewart and Stephen Colbert, two comedians who hosted satirical news programs on Comedy Central. Stewart and Colbert took a different approach; rather than focusing on current headlines, they created humorous, yet factually accurate slides on a broad range of social issues, many of which they felt got too little attention from the news media. Stewart reacted to the report of his positions’ popularity in trademark form, saying on *The Daily Show* that he and his

writing staff were floored, since their goal had been to “entertain and inform, not out the Democratic Party as a bunch of out-of-touch cuckoo-birds that are too liberal even for us stoned slackers.”<sup>199</sup>

### **REGAINING PERSPECTIVE**

The fact that both conservatives and liberals agreed more with the views of television personalities – some of them comedians – than with the parties that were supposed to represent them was disquieting. A closer look revealed striking similarities between these media titans that gave clues to their popularity.

O’Reilly was clearly conservative whereas Stewart and Colbert were unmistakably liberal, but most members of their respective audiences regarded them as independent thinkers. Neither followed a blind agenda. O’Reilly regularly held Republican feet to the fire, and no one was safe from Stewart’s jokes, Democrat or not. In addition, while relentlessly criticizing one another, these two rivals remained civil – they even appeared on each other’s shows. However, while doing so, neither let the other off easy or compromised his values. Their mutual respect shined through in cynical, yet sincere compliments. In 2011, O’Reilly once referred to Stewart as the “smartest of the left-wingers on television” on his show,<sup>200</sup> and Stewart told O’Reilly he was “the most reasonable voice on Fox.”<sup>201</sup>

The mass appeal of O’Reilly, Stewart, and Colbert’s thoughtful balance led party leaders to recognize that years of isolation had resulted in tunnel vision. Their television shows, like the Public Record, reached a broad audience of regular people, whereas politicians only interacted with a narrow, biased slice of their constituency. After all, many

people considered themselves Republicans, but only those with the strongest opinions called in to talk radio shows. Likewise, only a handful of Democrats cared enough to attend rallies. On the other hand, politicians lived in a bubble filled with party faithful, which distorted their view of the world. Worst of all, however, was how much they relied on bad information.

### **CALLING WRONG NUMBERS**

In the early 2000s, the world of politics lived and died with opinion polls. Elected officials based policy decisions on polls. Candidates crafted campaign strategies around polls. The media reported poll results with a reverence that suggested they were truths handed down from a higher power. However, there was a serious problem: All the polls were wrong.

Whether a news station was asking local residents about education bonds or a national research firm was measuring presidential approval, nearly every survey was conducted by telephone. However, the results of a poll can only predict the attitudes of a large group if the sample is representative of that group as a whole. As it was, research firms reached only a small, specific sliver of the population. It wasn't for their lack of trying. Many of us still remember receiving three calls a night from pollsters during election season. On the other hand, others do not remember this at all, and therein lay the first problem: They weren't calling everyone.

To save money, polls were increasingly conducted via automated telephone systems. While these "robo-polls" were just as accurate as live interviewers were,<sup>202</sup> it was illegal for automated systems to call mobile phones.<sup>203</sup> This

was not a problem in 1997, when 95 percent of American homes had phone lines.<sup>204</sup> However, as reliable mobile phone service spread, more and more people dropped their hardwired connections.

By 2009, one in four households had no landline. Just a year later, that figure increased to about one in three. Another 15 percent had a landline but essentially never answered it, choosing to receive their calls only on their mobile phones (largely to avoid unwanted calls).<sup>205</sup> This meant that by 2011, about half of American households were left out.

The other problem was unavoidable: Polls could only include data from people who cared enough to answer them. This meant only certain people participated, namely, those with very strong opinions and those with a lot of time on their hands. After all, one would have to be either very bored or passionate about an issue to endure a 20-minute survey during dinnertime. Most reasonable people just hung up.

This made polls overemphasize the opinions of wealthy retirees, people living alone, the unemployed, and those with extreme political views, while underrepresenting the lower and middle classes, families, people with jobs, younger voters, and moderates.<sup>206</sup> While statisticians can account for some sampling error, these problems resulted in two types of selection bias – coverage bias and non-response bias – that distorted the pollsters' view of America beyond repair.

Each year it got worse, as more people became unreachable and even fewer of those remaining chose to participate. These growing flaws were no secret within the industry. At

a 2009 statistics convention, Jay Leve, founder of one of America's largest public opinion polling firms, presented a litany of obstacles to phone polling that were the result of recent trends. Number portability meant that area codes no longer told pollsters where people lived. Caller ID allowed people to ignore calls from anyone they didn't recognize. Do-not-call lists put millions out of reach. Of the dwindling number of people who still had home phones, fewer answered them anymore, and even fewer still would talk to a stranger for 20 minutes to complete an interview. His conclusion:

*“If you look at where we are here in 2009, [phone polling is] over... this is the end. Something else has got to come along.”<sup>207</sup>*

## GETTING A CLEARER VIEW

He was right: Something else did come along. That something was the Public Record.

To start, the Public Record is trustworthy. Previously, most public opinion research was funded by organizations with a very specific agenda. This research was conducted privately and almost always returned results that benefited whomever paid for it. By contrast, the Public Record is free to use and completely transparent. It runs on open source software, which includes extensive fraud detection, and all results are publicly auditable. Its open design put to rest any questions of bias, finally producing information credible enough for political rivals to agree upon.

In addition, it is more accurate. Normal polls posed questions to thousands to predict the opinions of millions, which stopped working after pollsters could no longer select representative samples. The Public Record bypasses



this problem by simply collecting millions of opinions directly. In 2016, more people rated positions on the Public Record than voted in the presidential election; the sheer volume of participants eliminates sampling errors.

In traditional polling, collecting demographic information always created a trade-off: The more requested, the longer the survey, which meant in turn that fewer people would complete it. On the Public Record, participants only have to provide such information once, meaning every question they answer is automatically associated with a complete demographic profile. This depth of data is a pollster's dream, allowing statisticians to create virtual samples that represent any cross-section of the population while accurately filling in the gaps left by any groups underrepresented on the PRPP, such as the less affluent and the elderly.

Most important though, even more so than the number of participants, is the nature of their participation. Polls were interruptive and demanding. The Public Record, by contrast, is relaxed. People give their opinions on their own time, in a more thoughtful, less pressured manner. Everyone takes part, not just fanatics. Plus, gathering results over the course of years instead of during a single week makes results less subject to reactionary spikes from current headlines.

This approach allowed the Public Record to measure the nation's opinion more clearly, listening less to the squeakiest wheels and giving voice to the previously silent majority in the middle. As it turned out, that voice was significantly different than those used by the major parties and the media. Specifically, it was a voice of reasonable concern, not raving, hate-fueled shouting.

Fortunately, both sides were able to learn from these revelations. In the years following the introduction of the Public Record, there was a palpable shift in the official party positions. They did not change their stances so much as their tone, focusing on proving the merit of their own ideas rather than sowing hatred and fear of the opposition. For the most part, they removed the incendiary rhetoric that previously turned off everyone but extremists. This modest return to civility helped both the Democratic and Republican parties widen their tent pegs by realigning their core messages with the attitudes of their members.

### **MOVING MEDIA FORWARD**

The two major parties were not the only ones who were out of touch with public sentiment. The mainstream news media had also run off-track over the previous few decades, eventually choosing stories solely based on their dramatic value rather than their significance to their audiences. For example, in late 2010 and early 2011, the American media reported incessantly about the marriage of Prince William to Kate Middleton, giving it over twice the attention than even the British media did,<sup>208</sup> despite the fact that, a week before the wedding, fewer than 6 percent of Americans thought it was important enough to follow closely.<sup>209</sup>

The news media similarly reduced political coverage to tabloid journalism, mindlessly chasing celebrities and the smear campaigns that followed them, ignoring everyone else. In April 2011, 40 percent of news stories that featured any potential Republican presidential candidate were about Donald Trump, and a few months earlier, Sarah Palin received more coverage than all other potential candidates combined.<sup>210</sup> This attention was based on their superstar status rather than any relevance to national

politics. Trump had never held office, and Palin had only served two-and-a-half years as Alaska's governor. Most important, neither had said they were running for president, but merely that they were thinking about it.

Many said Trump never sincerely intended to run, and that his claims otherwise were a transparent ruse to boost the flagging ratings of his TV show, *The Apprentice*.<sup>211</sup> This accusation was all but confirmed when he said he would announce whether he was running during the season finale, which was taped six months earlier, then announced he was not running a few days before it aired.<sup>212</sup> Yet, during one six-week period, cable news still ran more stories on Trump and his conspiracy theories about the president's birthplace than the war in Afghanistan or the colossal budget deficit.<sup>213</sup> Although the idea the president was born outside of the US had already been widely debunked,<sup>214</sup> even by leading conservatives,<sup>215</sup> it remained persistently popular,<sup>216</sup> so at the very least there was some justification for covering the issue. But in the case of Palin, when no controversy existed, the media just invented one.

In one of the worst recent examples of yellow journalism, in June 2011, several news organizations launched a highly publicized investigation of Palin's email correspondence from 2006 to 2008. They were not even looking for anything specific; it was a desperate fishing expedition for dirt on someone who, again, was not seeking public office, but the media just loved to ridicule. It ultimately backfired, ending up as an embarrassing reenactment of opening Al Capone's vault,<sup>217</sup> but meanwhile real issues languished in relative obscurity. The same week, a debate was held between seven Republican candidates, only to be upstaged by around-the-clock live coverage of people reading Palin's

five-year-old emails, reporting excerpts about shopping lists or quiet parties at the governor's mansion.<sup>218</sup>

Even when the press covered people who were actually running for office, they focused on the wrong things. In a study of press coverage leading up to the 2008 election, half of all news was nothing more than “horse race” stories, which ignored the issues to talk about who was winning. Most of the rest were about candidates' personal details, like their romantic relationships, or other barely relevant aspects of the political game. Only 1 percent of news stories were about the candidates' public records.<sup>219</sup>

Just when it seemed the media had sunk too low to be saved, along came Apple and the Tea Party with their disruptive creation. The Public Record was an unprecedentedly clear window into the collective consciousness of American society. Not only did it describe what people thought about individual positions, but also how important they were in relation to each other. The Public Record's weekly and monthly lists of the most active topics accurately portrayed what was on people's minds.

At first, the media simply reported those lists, but soon the gap between the stories they chose to cover and the issues people actually cared about became inescapable. While network news coverage slowly began reflecting public interest, cable news hosts fully embraced the Public Record and integrated it into their programming. MSNBC's Chris Matthews regularly referenced position slides while sparring with guests on *Hardball*. On CNN, Wolf Blitzer added the Public Record to his stable of monitored news feeds on *The Situation Room*, and Anderson Cooper made frequent use of The Grinder in his “Keeping Them Honest” segment on *AC-360*.<sup>220</sup> Fox News' Bill O'Reilly went

further, creating a regular segment called “On the Record,” in which he devoted half of each Friday’s broadcast of *The O’Reilly Factor* to discuss the week’s top trending topics on the Public Record. Other shows covered the most popular topics of the year and of all time, giving the 24-hour news cycle a sense of memory it had always lacked, ensuring that important issues were not forgotten forever as soon as the spotlight moved to the next headline story.<sup>221</sup>

Finally, the talking heads were focusing on what mattered most to people, and that meant discussing money more than ever before. Integral to any conversation about whether we should, as a nation, take a particular course of action is how much that decision would cost. Costs consistently ranked as the most important concern across all topics: the cost of subsidizing education; the cost of waging war; the cost of cutting taxes; the cost of extending unemployment benefits; the cost of maintaining entitlement programs; the cost of reforming health care; the cost of servicing the deficit. To meet the demand for more financial information, media outlets, just like politicians, started relying heavily on data from United Metrics, which fundamentally changed the way they delivered political news.

In order to organize information in a manner that satisfied several opposing factions, United Metrics presented data in radically new ways, with an emphasis on making numbers relevant and easily understood. Similar to how the investment industry created EBITDA (Earnings Before Interest, Taxes, Depreciation, and Amortization) to standardize the way companies calculate their cash earnings, United Metrics created several new measurements to standardize political calculations. For

instance, they created EUR-8020, more commonly known as the Effective Unemployment Rate, which combines the Pareto Principle with the Bureau of Labor Statistics' lesser-cited U5 measurement (which includes disillusioned workers and the underemployed) to give a more complete picture of the true unemployment rate.

Some other standard units we use today that United Metrics created are AT\$ (annual taxpayer dollars) and LT\$ (lifetime taxpayer dollars). Just as astronomers use the term "light year" to help convey the magnitude of unfathomably long distances in space,<sup>222</sup> United Metrics uses AT\$ and LT\$ to help make sense of the enormous sums spent by Congress by dividing them by the number of taxpayers responsible for footing the bill.

When the media started presenting information in this format, it clarified discussions about federal spending. Previously, reporters would only describe bills in the most sensational ways possible, using billions and trillions of dollars, despite the fact that humans have a very difficult time processing large numbers. Their attempts to add perspective used meaningless comparisons, like saying that a trillion-high stack of bills would reach one-third of the way to the moon.<sup>223</sup>

Of course, journalists do not condescend to their audiences anymore by relating large sums of money to football fields full of cash or dollar bills laid end-to-end around the Equator. Instead, they use AT\$ and LT\$, which reasonably approximate the tangible impact to an individual. Today, the \$50 million total of a farm aid bill still reminds us that it is, indeed, a great deal of money. However, its 48-cent cost per taxpayer puts it in perspective with, for example, \$21 billion in oil company tax breaks that cost each

taxpayer \$20 a year for ten years, or a \$1.5 trillion bank bailout and stimulus package that has a per-taxpayer price of over \$14,400.<sup>224</sup> Using standard measurements makes it harder for pundits to make glib comparisons between the three merely because the words “million,” “billion,” and “trillion” all register in our brains as “really big numbers.”

More important, per-taxpayer measurements make it harder for politicians to mislead the public. A prime example of this occurred in 2011 when the US Congress congratulated itself for avoiding a government shutdown with a “historic compromise” on \$38 billion of spending cuts – or about \$365 per taxpayer.<sup>225</sup> As it turned out, a review by the Congressional Budget Office a week later found that, ignoring accounting smoke and mirrors, the actual spending cuts amounted to less than four dollars per taxpayer.<sup>226</sup> However, even if the higher figure had been true, it wouldn’t have put much of a dent in the ever-growing \$14 trillion national deficit, which amounted to over \$137,000 per taxpayer at the time.<sup>227</sup>

Facing a rekindled demand for fine details about issues of substance, news organizations could no longer afford to be sloppy. Over the years, they had steadily cut fact-checking positions with each round of layoffs. Quality suffered, but ratings did not; instead, the news industry and its audiences had just gotten used to poor journalism. However, after so many tiny details started passing under The Grinder’s microscope, media outlets scrambled to staff up their research departments again.

Ultimately, both the news and political industries learned the same lesson: They did not need to rely on contrived drama and fear. Accurately discussing issues relevant to their audiences was interesting enough to hold their

attention. Politicians toned down their rhetoric and the media slowly returned to reporting stories based on their newsworthiness rather than only their entertainment value.

## **PATRIOT DUTY RETURNS**

Between restoring rationality to politicians and the press, as well as engaging individuals directly through the Public Record, Apple, the Occupy movement, and the Tea Party had raised political involvement to historic heights. As the 2016 election neared, the nation turned its attention to the original event that had started it all: patriot duty.

Beginning in October 2014, Occupy and the Tea Party teamed up again, piggybacking on the political high of the upcoming midterm elections to launch a campaign to register more people for patriot duty. Their methods varied, but they were all grassroots efforts. Occupiers used social networking tools and viral videos, while the Tea Party spent more time passing out flyers and spreading the message door-to-door in their neighborhoods. Fortunately, local news stations reported their work, removing the need for costly advertising, and since it required only an email address, signing up could not have been much easier.

## **PATRIOT DUTY MANIA**

By July 2015, 80 million people had registered – over half the amount expected to vote in the upcoming election. From conservative twentysomethings who thought foreign aid should be cut to liberal senior citizens who wanted marijuana legalized, everyone signed up. By working with Occupiers and attracting such a diverse crowd, patriot duty



stopped being a Tea Party event and became a community-wide activity. Cognizant that up to a quarter of the country would take part, the media geared up to cover this massive story. Leading the way, as usual, was television.

The national networks have traditionally had trouble doing anything but copy what has already been done by others,<sup>228</sup> and this was no exception. Patriot duty was still new and did not match any of their existing templates. It happened every four years, but it wasn't the Olympics. It selected one person out of many, but it wasn't a talent show. It thrust people with different lifestyles together, but it wasn't a reality show. In the end, the national news treated patriot duty as a human interest story, not hard news, leaving their local affiliates to interview participants and talk to business owners about the spike of business that hosting meetings had brought them.

The big networks may have dropped the ball, but cable was there to pick it up and run. Every major cable news show developed regular segments about patriot duty, like "Patriot Watch" on *CNN Newsroom* and "Progressive Selection" on MSNBC's *The Rachel Maddow Show*. Fox News Channel went further, creating *The Revolution with Glenn Beck*,<sup>229</sup> a daily, hour-long show that ran for the duration of patriot duty. (You may recall its famous tagline, "The Revolution WILL Be Televised.") Each show combed through countless hours of video to find noteworthy clips of everyday citizens discussing issues, while pundits offered analysis of their opinions.

Patriot duty mania was not limited only to news channels. E! Entertainment Television's *E! News* dug through meetings in prestigious ZIP Codes for footage of celebrities, a move that drew some criticism, but nevertheless

promoted the movement by showing the Hollywood elite performing their civic duty. Even ESPN got in on the action, with *SportsCenter* delivering lighthearted coverage of the eight-week process in the style of the NCAA college basketball tournament, complete with a bracket of the nation divided into 64 zones. Because of Cook's giveaway, Apple was the de facto sponsor of the entire event, with the *iPad 7* appearing on every network.

After all the dust had settled, 42 million people, or about one in three voters, participated. With such an enormous size, the group's demographics no longer mirrored those of the Tea Party, but instead represented the country as a whole. As a result, this time the winner was a very different candidate, one whose ideology did not closely resemble that of the people who designed and facilitated the process that selected him.

Rising to the top of a pool of millions, Peter Lindgreen again proved patriot duty to be capable of selecting remarkably talented candidates. Just like Patros before him, Lindgreen also had an impressive background. A medical doctor who later became the CEO of a non-profit health insurance group, Lindgreen promised to use his expertise to bring about comprehensive healthcare reform, a feat Presidents Patros and Obama before him had been unable to accomplish. However, he was hardly an ideal Tea Party candidate.

While Lindgreen was a fiscal conservative who advocated smaller government and reduced spending, he also held many socially progressive views that clashed with the opinions held by the majority of the Tea Party. Furthermore, he was a Democrat, whereas the leaders of the Tea Party at the time were predominantly Republican.

Despite their differences, those leaders still gave Lindgreen their full support. Jenny Beth Martin, co-founder of the Tea Party Patriots, defended their endorsement in an interview:

*Lindgreen is hardly the first Democrat we've backed – we supported eight in 2010 alone<sup>230</sup> – and he's essentially a Libertarian, but that's not the point.*

*The Tea Party is a movement, not a political party. Patriot duty brings everyone together, everyone who is sick of the culture of corruption in our government and wants to make a difference. The people have spoken. They want Peter Lindgreen, and we stand by them and the process.*

*Lindgreen agrees with the Tea Party on the most important issues. He follows our platform of fiscal responsibility, and he would make an excellent president. Besides, if anyone can fix the healthcare crisis, he can.*

In one of the strangest twists in American political history, the Tea Party was in the unusual position of endorsing a candidate to run against a president they helped put in the White House and still strongly supported. On the apparent dichotomy, Martin said, “Competition is good for the country. We support both Mr. Lindgreen and President Patros and wish them both the best of luck.”

That unlikely showdown never happened, though. For all the fanfare and attention from the media, Lindgreen proved to be too moderate to win the Democratic nomination. That honor went to the more liberal Senator Kay Hagan (D-NC), who ran a strong, but ultimately unsuccessful, campaign against Patros, who was re-elected to a second term.

## THREE-CORNERED CONTESTS

Lindgreen's loss in the primaries was an anticlimactic end to one of the largest grassroots political events in history. Never again have as many people participated in patriot duty as in 2015. Political analysts liken this phenomenon to the youth turnout in 1972, the first time 18-year-olds could vote.<sup>231</sup> More young people voted that year than any other because it was new, they say, but once the novelty wore off, only those who actually cared made the effort.

The same held true for patriot duty. The next time, in 2019, the process had been around for almost a decade and was no longer a new concept. The media did not treat it as a once-in-a-lifetime event, but rather as what it had become: an established part of election season. That year, 25 million citizens met and ultimately selected Jay Woodson, a moderate who ran as an Independent to avoid Lindgreen's fate of not making it past the primaries.

Although Woodson carried no states, he received about 22 percent of the popular vote, the highest amount for a third-party candidate since Theodore Roosevelt tried to regain the presidency in 1912 under the banner of the Progressive Party.<sup>232</sup> When the Republican candidate won, the Democrats blamed Woodson and compared him to Ralph Nader, whom many blamed for Al Gore's defeat by splitting the liberal vote in 2000.<sup>233</sup> While it is impossible to know if either claim is true, what is certain is that the Tea Party's contributions made the next few elections wildly unpredictable.

Because it forced consensus from such a large, diverse group, the progressive selection process always favored moderates. The next four candidates selected, Lee Cedeno,

Pat Whalen, Rita Isho, and Douglas Langley, also ran as Independents. None of them won, but each received over 15 percent of the popular vote. Each time, the defeated Democrat or Republican blamed the outcome on patriot duty and questioned the value of the process. To their opponents, these were just the grumblings of sore losers, but they contained a kernel of truth: Patriot duty candidates had fallen into an uncomfortable pattern of always disrupting elections, but never winning them.

Commentators warned that patriot duty's initial success was a fluke, made possible only by the Tea Party's close alignment with the Republicans at the time. The process still found talented people, but since it had grown it always selected centrists, and anyone who wasn't a political extremist had no real place in the entrenched two-party system. Without the support of a major party, critics said, they were doomed to failure. After all, they pointed out, the only true Independent president had been George Washington, and no president had been elected without the support of the Republican or Democratic Party since Millard Fillmore, nearly 200 years earlier.<sup>234</sup>

On the other hand, patriot duty consistently identified supremely qualified candidates. Woodson, Cedeno, and Isho all went on to win seats in the Senate after their failed presidential bids. In fact, making it to the last few rounds of patriot duty was enough of a springboard to launch dozens of successful political careers, but none of them made it to the White House.

Many suggested forming a third party,<sup>235</sup> but Tea Party leaders insisted they intended to do no such thing. "Party mentality is how we got in this mess," said Mark Meckler in an interview. Then, showing remarkable humility and

foresight, he added, “If we turned the Tea Party into a political party, we would eventually become part of the problem. We couldn’t avoid it.”<sup>236</sup>

## COLETTE SAWYER

Twenty-five years after its inception, patriot duty seemed cursed only to split votes and churn out senators, not presidents. However, all that changed when Colette Sawyer was selected in 2035.

Sawyer was independent in every sense of the word. Shortly after her daughter Lydia was born, Sawyer’s husband was shot and killed as a bystander to an armed robbery, leaving her a widow and single mother. After Lydia reached school age, Sawyer became dissatisfied with the quality of the education she was receiving. Many parents in the same situation would gripe, but do nothing; others might attend PTA meetings. But not Sawyer. Instead, she spent about a year researching the school system and developing a detailed plan to reform what she described as a “stifling bureaucracy.”

She shared her plan with school boards across the state, finding widespread support from teachers and administrators alike. Higher up in the department, she met resistance, as her plan crossed the desks of the people whose policies it criticized and careers it threatened. Their response: It couldn’t be done. Unfazed, she quit her job as a marriage therapist and ran for Indiana Superintendent of Public Instruction. Even more incredibly, she won, a feat made all the more remarkable by the fact that the position normally went to career politicians and educators.

Sawyer wasted no time worrying about making friends at her new job. Within the first six months, she had fired a quarter of the staff and reassigned half the people remaining. For the next year and a half, she worked tirelessly to overhaul the entire department, eliminating ineffective programs and collaborating with teachers and specialists to develop better ones. Her methods ruffled feathers but no one could argue with the results: Teachers were happier, the department was no longer bankrupt, and test scores were already on the rise. The Indiana State Teachers Association begged her to run for re-election; however, she had accomplished all her goals and had already set her sights on another department in bad need of reform.

She spent the next two decades cutting a swath through the Indiana state government, leaving in her wake a trail of budget surpluses and successful initiatives. After the Department of Education, she made stops in the Departments of Transportation, Veterans' Affairs, Labor, Health, Commerce, and Natural Resources. At each, she spent exactly one term in office and followed the same strategy of cleaning house and replacing bad policies. Within the state government, she earned a reputation as a demanding but fair leader who listened to the soldiers in the trenches as much as the lieutenants. Among her constituents, she was more of a local hero, fixing the government one branch at a time. By the time she won the 2035 patriot duty selection, she had been elected to five different state positions and appointed to two more.

While she was a force to be reckoned with at the state level, Sawyer was hardly a typical presidential candidate. To put it delicately (not that she put anything delicately herself),

she lacked the natural charm of modern presidents. She avoided the flowery rhetoric universally used by politicians and was instead harsh and abrasive. Her sharp wit and short temper combined often to rip her foes to shreds with biting criticism. She never smiled, not even for photos. She ordered people around and cut them off while they were talking. She swore in public. She did not cooperate with the press; in fact, she was borderline hostile. Supporters called her “no-nonsense” and “tough as nails,” but “insensitive” and “mean” were some of the nicer words detractors used to describe her.

Then there was the unavoidable issue of her physical appearance. While an average-looking senior woman would not seem out of place in most European governments, Sawyer simply did not look like an American president. For decades, we elected tall, handsome men with perfect haircuts and winning smiles. (In fact, no president had been less than six feet tall since Jimmy Carter.) Sawyer, by contrast, was short and stocky with thinning hair and a permanent, wrinkled scowl. In addition, while the United States had never even come close to electing a woman before, Sawyer did not fit the mold of the ideal female candidate her predecessors had established, either. Every woman either major party had supported in the last 40 years had been younger, more physically attractive, and chic. Sawyer, on the other hand, was older and unapologetically unphotogenic, shunning stylists and wardrobe consultants as a waste of time. She once quipped to a reporter, “Allowing voters to choose only among beautiful people does the rest of us a disservice.”



## THE CAMPAIGN TRAIL

Not only did Sawyer not look the part, but she also did not act as if she were running for president. Patriot duty concludes in September the year before each election, giving those selected a little over a year to build their campaigns. However, for the first eight months, Sawyer spent most of her time hidden from the public eye, hard at work on a plan to simplify the nation's tax code. Instead of giving stump speeches and attending fundraisers, she met privately with economic analysts, lawyers, and members of Congress.

On July 4, 2036, she shared the results of her labor on the Public Forum: a plan that would abolish federal income tax for individuals, replacing it with a federal consumption tax. The plan also removed about a million pages' worth of loopholes from the byzantine corporate tax code. It was not a brand new idea, but Sawyer had done the legwork to fine-tune the details and collect support for the plan from a broad spectrum of lawmakers and industry leaders. Only after her tax plan was ready did she step up her campaign activity. Even then, according to her staff, she treated the election like an annoying distraction. Her campaign manager, Ana Moreida, wrote of the experience:

*She wanted to skip a major press event to have another meeting about the tax plan. I said, "Don't you think we should be there? They're both ahead by over 30 points."*

*She held my arm and told me, "Don't worry about them. They're just talking about the job. We're actually doing it. We'll catch up. Now come on, we have work to do."*

*She acted like she'd won already. I don't think she doubted for a second she would be elected. The rest of us, I hate to admit, were not so sure.*

Moreida's skepticism was understandable. Sawyer's tax simplification plan ostracized her from much of the fundraising community, since virtually all industries enjoyed lucrative tax breaks her plan would eliminate. Moreover, she faced two of the strongest candidates to run in decades.

President Whitfield was ending his second term, leaving the race wide open for newcomers. Both of Sawyer's opponents were extremely qualified and admired by their respective parties. Gerald Brewer, the Republican candidate, had a solid military background and made improving national security his priority, a key topic in light of recent terrorist attacks. While the press sometimes likened Brewer to Ronald Reagan for his support of supply-side economics, Jim Levinston, the Democratic candidate, was constantly compared to John F. Kennedy, although the resemblance was based on his youth and personality more than his policy. Levinston built his platform on an expensive but popular plan to repair much of the aging infrastructure throughout the United States, an effort aimed at fostering growth and stimulating the economy.

Brewer had the support of the business community and much of the middle and upper classes, while Levinston was popular among labor unions, the working class, and minority voters. Meanwhile, Sawyer's tax simplification plan had earned her a loyal following among die-hard reformists, but apart from that she was practically unknown. She did not even break the double digits in most polls, and analysts on both sides predicted she would draw

most of her votes away from Brewer to hand the election to Levinston.

Making matters worse, her combative attitude toward the media had done her no favors, and what scarce publicity she received was not flattering. Regular news stories suggesting she was extraneous were bad enough, but a *Saturday Night Live* sketch parodying the upcoming debates was particularly damning. The cast lampooned Levinston as a smooth-talking ladies' man, Brewer as a bore, and Sawyer as a senile old woman who did not know where she was because she could not see over the podium. Unfortunately, none of these caricatures were far off the mark from public opinion.

## THE 2036 PRESIDENTIAL DEBATES

To understand how a marginalized Independent transformed herself from the media's punching bag into a serious contender, one must look no further than the presidential debates. Heading into the first round, Sawyer had a lot of ground to make up, but it was the only forum where a third-party candidate could hope to receive equal time from the press. It began ordinarily enough, with Levinston and Brewer both delivering polished but predictable responses to a tame question about health insurance. When it was Sawyer's turn to speak, however, she came out swinging with her famous first words: "Wake up America. You are being lied to."

She then proceeded to dismantle both of her opponents' positions, providing a detailed description of how they would benefit the insurance companies, but not the people they insured. Caught off guard, their rebuttals were weak. Brewer stammered his way through rephrasing his original

statement, while Levinston launched into an emotional diatribe about America's lack of universal healthcare. Sawyer denounced them both, saying:

*You're oversimplifying everything into sound bites, but the problem is more complicated. Not every good idea rhymes and fits on a bumper sticker, you know.*

*Jerry, your plan won't do much except shuffle papers around. Some people will see premiums reduced by a few percent, but at a cost of basic services worth ten times as much. Losing a lot to save a little is a bad deal.*

*Jim, your plan is more dangerous. Let's start with where you're right. Yes, the United States is the only industrialized country that does not have universal healthcare.<sup>237</sup> The rest have all had it since at least the 1990s; some of them for 150 years.<sup>238</sup>*

*You keep bringing up Austria as an example. But America is not Austria. For starters, we spend 20 percent of our budget on our military, the finest in the world. We spend almost as much as everyone else in the world combined.<sup>239</sup> And before you start saying we should spend less, think for one second what things would be like if we didn't.*

*Part of the reason Austria can afford to mandate universal coverage is that they spend less than 1 percent of their GDP on defense. In fact, how many countries outside the Middle East spend more than 5 percent of their GDP on their military? None.<sup>240</sup> Yes, lots of other countries have universal healthcare, but they all rely on us to keep them safe. When terrorists attack us, what do we do? We hunt them down. When terrorists attack other first-world nations, what do they do? They call us.*

*That's just one difference. You can't just say, "Let's copy Austria," and pretend that everything else is the same. America is different. It always has been, and always will be.*

*Here's another way we are different: Healthcare is a lot more expensive here than anywhere else. That's the main problem, and your plan won't fix that.*

*Mandating coverage and subsidizing the poor would just transfer a ridiculous amount of taxpayer money to insurance companies.*

*Democrats have been trying to pass universal healthcare for 100 years, ever since FDR started Social Security. The plans all start out fine, but what actually gets passed after the lobbyists have their way? Some legislative abomination that you call "progress," but ends up only giving more power and money to the insurance companies.*

*Ninety percent of Congress is in healthcare's pocket. Which industry spends the most on lobbying? Pharmaceuticals. Which spends the second most? Insurance.<sup>241</sup> You know you don't have the votes to pass your plan without changes. What do you think the final bill would look like?*

*When you tell people your plan is going to help them, you're either naïve or you're lying. I don't know which is worse.*

*Here is the hard truth, America: It doesn't matter which one of us you elect. You're not going to get true healthcare reform any time soon.*

*There is no use sugarcoating it: Our healthcare system is so broken that it cannot be fixed. It needs to be replaced. But none of us up here can do that. Only you can. Unless you elect enough people to Congress who are not bought and paid for by the insurance industry, you're just going to get more of the same. Until that happens, every promise of reform is a lie. At our very best, we can only offer minor improvements.*

*Now, Mr. Brewer, we've heard your bad plan, and Senator Levinston, we've heard your bad plan. The problem is you both act like those are the only two options.*

*Now, when you attacked me, neither of you even mentioned the bill I support. It's the Larew-Arden Act, which would reduce total costs for working families in a way that won't hurt the insurance companies' bottom line, so it could actually pass as it is written.*

*It's all there on the Public Record. On my platform, under "Healthcare." Perhaps you boys should have read it.*

With that pointed comment, she identified Levinston and Brewer's mistake: Neither had considered Sawyer a threat. Both men were adept speakers and had carefully crafted arguments against the opposing party line, but fighting for so long from their partisan bunkers had left them open to being blindsided by new ideas. They had underestimated her, and it cost them.

Question after question, Sawyer steamrolled over their answers, exposing errors and inconsistencies while presenting viable alternatives. Throughout the debate, she remained levelheaded as she gutted their arguments without remorse. Her opponents, on the other hand, were rattled, with Levinston uncharacteristically tripping over words and Brewer visibly sweating. Normally the number of people watching live coverage of presidential debates dwindles after the first half hour. This time, the audience actually grew as the internet buzzed with professional commentary and friends telling each other what they were missing.

The last portion of the debate revolved around gun control, which had become a hot-button issue again after the Democrats gained several House seats in 2034 and began pushing for stricter laws. After the moderator asked the candidates for their opinions on the proposed legislation,

the conversation took a turn that radically changed the course of the election:

*[LEVINSTON]*

*...Gun violence is a national epidemic, and it's long overdue that we do something about it. Fifty-six percent of Americans agree with me. The police agree with me. Schoolteachers agree with me. Mrs. Sawyer here, of course, agrees with me, that handguns should not be so easy to obtain. To get these guns off the streets, we need stricter controls on ...*

*[SAWYER]*

*Excuse me? When did I say that?*

*[MODERATOR]*

*Mrs. Sawyer, it is not your turn to...*

*[SAWYER]*

*No, we need to clear this up. Deal with it. Skip me on the next question if you have to. Now Jim, when did I ever say we should restrict handguns? Who does your research?*

*[MODERATOR]*

*Mrs. Sawyer...*

*[LEVINSTON]*

*It's alright. I understand this is an emotional issue for you. I was, of course, referring to the tragedy of your husband being killed by a handgun and I was merely saying that...*

*[SAWYER]*

*Stop right there. My husband was killed by a man, not a gun. You need to stop blaming inanimate objects for what people choose to do with them.*

*If my husband had been stabbed, do you think I would try to outlaw knives? Would I tell everyone to cut their steaks with a spoon? Do you even hear how ridiculous that sounds?*

*[LEVINSTON]*

*No, I'm saying...*

*[SAWYER]*

*I'm not done.*

*Gun control laws are fine in theory, but criminals have an annoying habit of ignoring them. So until you can tell me there are no violent people left in the world, you need to stop trying to pass laws that would interfere with me defending myself or my family.*

*And you [points to Brewer], you need to stop trying to tell me that everything is fine and that firearms are perfectly safe. Guns are tools designed with a singular purpose: to kill. We have eight times as many homicides with guns here in America than in all other developed countries combined.<sup>242</sup> And gun safes are a joke.<sup>243</sup> No, everything is not fine.*

*And both of you need to stop putting words in my mouth. It's dishonest and it's unproductive. Just stop it.*

*Now since you both seem to think I have a thing against guns, would you two gentlemen like to hear what I actually feel about gun control and discuss it?*

*[LEVINSTON]*

*But I was... yes. You can have my time.*

*[BREWER]*

*By all means, go right ahead.*

*[SAWYER]*

*Thank you. I think the Second Amendment is part of what makes America great and unique, and it's more*



*important than you give it credit. This country was created with guns. Guns are a permanent part of our society, so the question becomes: “How do we deal with their inherent danger?”*

*We have the most guns per capita, but Switzerland is number three and they also have one of the lowest murder rates in the world.<sup>244</sup> One of our problems is that guns are everywhere, but hardly anyone knows how to use them anymore. I think a good start would be making gun safety courses mandatory, starting in high school. It would reduce gun-related accidents, help our military, and...*

*[LEVINSTON]*

*Wait. Let me get this straight. You want to bring guns... excuse me; make that even more guns into schools?*

*[SAWYER]*

*This isn't a new idea, Jim. Before the 1960s, high schools used to have firing ranges, you know. You also don't necessarily need to use live ammo to teach gun safety.*

*[LEVINSTON]*

*But I hardly think glorifying such a...*

*[SAWYER]*

*Glorifying? Glorifying? Are you kidding?*

*Find me a high school teacher who can glorify something to teenagers, Jim. I'll make him Secretary of Education.*

*No, trust me, it would have the opposite effect. The quickest way to make something “uncool” is to make it a required subject. We teach math, too. Do we have algebra gangs?*

*No, Hollywood glorifies guns, right alongside driving fast and having sex. Should we ban action movies? You want to take out the First Amendment too while you're at it?*

*[LEVINSTON]*

*No, no, that's not what I am saying at all. You said yourself that guns are dangerous...*

*[SAWYER]*

*Guns are dangerous, sure. So is not knowing how to use one. Ignorance is dangerous, Jim. You're promoting ignorance.*

*And you're no better, Jerry. He doesn't want to teach them about guns and you don't want to teach them about sex.*

*Young people always have and always will engage in risky behavior no matter what we do. We can at least teach them the dangers and how to protect themselves.*

*[LEVINSTON]*

*Mrs. Sawyer, if you would please just let me finish one sentence, you would see that I actually agree with most of...*

*[SAWYER]*

*No, we've heard your side, and you're wrong. You're missing the whole point.*

*Whether we teach gun safety in school or not, that's just one wild idea. I have dozens more. But you don't. You have one idea that won't do anything but erode the Constitution.*

*Your fundamental problem is that neither of you respect regular Americans. Both of you think you can write laws to run people's lives better than they can. Jim, you want to treat adults like children by taking away their freedom. And Jerry, you are just as bad.*

*You want to treat children like infants by not telling them about the dangers of the world.*

*My husband did not die because a man had a gun. He died because that man would rather shoot someone than get a job. Part of the reason so many people are like him is that we expect so little from them. They've had everything handed to them and have never been challenged in their entire lives.*

*Bottom line: I suggested education, you got scared and said they couldn't handle it. You're dead wrong, Jim.*

*We need to stop coddling our kids. Our youngest generation is an international embarrassment. We're the second richest country in the world,<sup>245</sup> but our children are lazy, disrespectful, overmedicated, and undereducated. And these are the people who are supposed to take care of us when we're old? No. This changes now. Next topic.*

The crowd erupted in applause despite rules against doing so, much to the chagrin of Levinston. Sawyer's tirade was the top story on the evening news and video clips spread virally. "Deal with it" and "Next topic" became instant catchphrases. *PoliticalMemes.com* created an application that allowed users to easily add their own text over photos of Sawyer, and witty campaign ads made by fans soon blanketed the internet.

The *Saturday Night Live* crew reprised their debate sketch a few nights later, only this time Sawyer pulled a medieval sword out of her oversized handbag and chopped her opponents to pieces before doing a backflip.

Illustration: Fan-made Sawyer campaign ads<sup>246</sup>



Meanwhile, commentators on every channel compared the evening to another historical media milestone. In 1960, Richard Nixon faced John F. Kennedy in the first presidential debate ever televised. Nixon, who was recovering from the flu and refused to wear makeup, looked pale and weak. Kennedy, on the other hand, with his natural good looks enhanced by makeup and a better suit color, looked well-rested and vital. Both men presented solid arguments. However, a study found that while people who listened to the debate on the radio thought the contest was a draw, those who watched the broadcast thought Kennedy had won, forever changing the way campaigns are run due to television's powerful effect on voters' perceptions.<sup>247</sup>

The press had already been comparing Levinston to Kennedy, which, in this analogy, meant Sawyer was Nixon. Only this time, the tables were turned when the untelegenic curmudgeon clobbered the handsome young

buck. The news media constantly discussed Sawyer, pushing Levinston and Brewer into the background. Apart from the Nixon reference, the media could not agree on how to classify her. One critic called her “a dangerously liberal British nanny without the accent.” Another responded by saying, “Based on her policy, she’s more of an arch-conservative without the Bible-thumping.” What they could agree on, though, was that the crowd loved her. Polls declared her the clear winner of the debates and showed her with a 12-point lift just two days later, gained mostly from undecided voters. Representatives from both major parties cried foul because Sawyer received slightly more speaking time, which backfired by making their candidates appear weak, or as one pundit put it, “unable to handle an old lady telling it like it is.”

## **THE SECOND DEBATE**

All the attention resulted in over twice as many people watching the second debate. Those who tuned in hoping to see a repeat of Sawyer’s performance the previous week were not disappointed. Her two opponents were prepared this time, though, after her disarming exterior was revealed to contain a fierce competitor. Instead of focusing on each other, Levinston and Brewer went after Sawyer. Although no one descended to personal insults, their exchanges were nevertheless heated and vicious.

Levinston brought up her record of mass firings and deep budget cuts throughout her tenure in the Indiana state government. He claimed that similar policies enacted on a national level would result in a huge spike of joblessness. Sawyer countered with statistics that showed her pruning had no long-term effect on unemployment and left the economy healthier for everyone than it had been before.

Brewer criticized her for statements she made about President Whitfield's unpopular decision to order a military drone strike in Eritrea. In a recent interview, when asked what she would have done differently, Sawyer had answered, "I don't know. Next topic." In response, Brewer accused her of being unfit to lead, saying, "Presidents don't get to skip the tough questions."

Sawyer struck back hard:

*I did not skip the question. I stand by my answer.*

*I'm all for open government, but in matters like this, the president is privy to information that you and I don't have.*

*The president sometimes has to make hard decisions that the public won't understand, and unpatriotic armchair quarterbacking like this doesn't make it any easier.*

*I'll go further and say I'd probably do exactly what President Whitfield did. If I were in his shoes, I would almost surely follow the recommendation of the Joint Chiefs, which I am betting he did. But since none of us here are members of the National Security Council, none of us could know what we would do. So again, I don't know.*

*The main thing I don't know is how you two can be so sure what you'd do when neither of you have all the information.*

Reprimanded in what was normally his strongest area, Brewer still pressed on. Both of them attacked her tax plan: Brewer said it would force companies to outsource even more jobs to other countries and Levinston claimed the changes would push the lower middle class into poverty. Sawyer accused them both of cheap scare tactics to protect their "corporate masters," rattling off a list of each

opponent's largest donors and the tax loopholes it would close for them, then naming prominent members of their own parties who supported her plan.

To ease the tension and end on a high note, for decades debates had traditionally closed with softball questions about non-political topics. As the debate wound down, a few of these came up, but instead of playing along, Sawyer lashed out at the moderator:

*[MODERATOR]*

*What is your favorite movie and why?*

*[SAWYER]*

*That's a stupid question. Next topic.*

*[MODERATOR]*

*Mrs. Sawyer, these questions may not seem serious, but they are designed to humanize you and the other candidates. It is important for voters to get to know...*

*[SAWYER]*

*No it isn't, and that entire concept is ridiculous.*

*[MODERATOR]*

*Mrs. Sawyer, you are saying that getting to know the candidates is not important? Would you like to clarify?*

*[SAWYER]*

*I am saying that irrelevant trivia about me is not important.*

*Asking me to name my favorite movie is worse than a stupid question. It's a harmful question. You hurt the political process by pretending that it's important. I thought Citizen Kane was boring. Who cares? Are you looking for a film critic or a good president?*

*You want to hear a real campaign promise? I promise you that we're not going to get to know each other and we're not going to be best friends. In fact, a year from now, you won't like me very much. I guarantee that I'll cut the budget of something important to you. I can promise this because money is being wasted at every single level of government, and I am going to stop it.*

*I promise that you'll get really mad at me at first. You might even hate me. We'll make some hard cuts, but that will give us the money to actually fix things. And I promise that by the end of my term, you'll see it was for the best.*

*This guy [pointing to Levinston] says he's got a plan that everyone will be happy with. I hate to ruin Christmas for you, but there's no such thing.*

*Stop waiting for some fairy tale prince to come and magically fix everything. It's time to grow up. Our country has been sick with "spendicitis" for a long time, and it's time for us to take our medicine.*

The crowd ate it up, and when polls declared Sawyer the winner of the second debate as well, analysts concluded that the all-out offensive against her had been another mistake. Their string of unsuccessful attacks made Levinston and Brewer look bad enough. Worse, although neither allowed her to hijack the conversation as she had the first week, they made the debate all about Sawyer's ideas, many of which had previously received little attention. In particular, her tax plan painted a picture in which people no longer had to dread the 15th of April, a concept that resonated with the masses.

From then on, the two men were more cautious, but the damage was done. By most accounts, Sawyer also won the next two debates, although the victories were not as lopsided as the first two. Polls showed her steadily gaining



momentum among voters. The party faithful stayed true to Brewer and Levinston, but Sawyer won over Independents as well as moderate Democrats and Republicans in droves. Sawyer also opened up to the press, who, after almost a year of stale headlines about Brewer and Levinston, jumped at the chance to cover the election from a fresh angle.

### **THE FINAL DEBATE**

Sawyer's support grew with each successive debate, as did the number of people watching. The Nixon-Kennedy debates achieved the highest television ratings of any presidential debates in history.<sup>248</sup> The fifth and final debate did not topple that record, although it came close. Nearly half the households in the country watched it live, which was an accomplishment in an era of 5,000 channels instead of three. With polls placing Sawyer within striking distance of the presidency, even those with only a passing interest in politics watched, curious to meet the relative stranger who could be their next leader.

People tuning in for the first time saw a different Colette Sawyer than those who had been watching since the beginning. She was calmer, almost relaxed, and her remarks lacked the venom of the previous four debates. In fact, she was, compared to her normally severe demeanor, in what appeared to be a good mood. Instead of using her wit to tear into her opponents, she even deadpanned a few self-deprecating jokes about her age and her looks.

In the previous debates, when refuting an opponent's statement, Sawyer made point after point, only relenting when her time was up, and often not even then. This time, she quickly dismissed their arguments and went on to

describe the first actions she planned to take as president. She spoke with supreme confidence, never using the phrase, “If I am elected...” Instead, she matter-of-factly discussed the people she planned to appoint to her cabinet.

The most memorable moment occurred at the end of the evening while discussing a recent rash of terrorist attacks against the United States. Brewer answered first, giving a lengthy and detailed explanation of his plans to tighten national security. The following excerpt shows Sawyer’s response:

*[MODERATOR]*

*Mrs. Sawyer, you have two minutes for your rebuttal.*

*[SAWYER]*

*What’s there to rebut? Anyone with half a brain can see he’s obviously right.*

*I’m going to use my time to take care of some important housekeeping instead. I’ve made a solid plan for my cabinet, but I have purposefully left two seats unfilled.*

*Mr. Brewer, Senator Levinston, I have been very hard on you both, but I want you and everyone watching to know how much I respect you.*

*Mr. Brewer, you are wrong about taxes, but you are a genius, especially in national security. You have great ideas, but you’ll never be elected because you just put half the nation to sleep explaining them. A sad state of affairs, maybe, but that’s just the way it is.*

*However, it is imperative that we do everything you just said. That’s why I’d like to appoint you as the Secretary of Homeland Security. I hope when this is all over you can look past our differences to do what’s right for the safety of the American people.*

*Senator Levinston, you, on the other hand, you have a shot. When people look at you, they see the face of the nation. If I had to pick your face or mine, well, I can't say I blame them. But unfortunately for you, this is no beauty contest.*

*You're too soft on spending. Your record shows you won't make the cuts we need and you couldn't balance a budget if your life depended on it. You'd be popular, sure, but we'd be bankrupt by the time you left office.*

*You're not the right man to be president, but you'd make a perfect Secretary of State. You embody the best of American exceptionalism and I can't think of anyone better to represent us to the rest of the world. Lord knows I shouldn't. We can't afford another war.*

*[LEVINSTON]*

*With all... [chuckles] Excuse me. With all due respect, don't you think it's a little premature to be appointing people?*

*[SAWYER]*

*Well, you don't have to worry about an answer until November. But if the latest polls are any indication, you should both give it some thought. We have a lot of work to do, and I want you both on my team.*

Overconfidence normally turns people off, but coming from Sawyer, it was an endearing break from the veneer of false modesty worn by most politicians. Her presumptive job offers and gracious, albeit backhanded, compliments showed a sincere spirit of cooperation that no canned claims of bipartisanship could rival. Ultimately, the combination appealed to enough voters to push Sawyer over the top, as the United States went to the polls two weeks later and awarded her the presidency with over 40 percent of the popular vote.

## ANALYSIS OF THE 2036 ELECTION

When congratulating her team, Sawyer said, “We won the same way I won my very first election: By being over-prepared and underestimated.” Analysts, however, offer differing explanations for her victory. Some argue that most voters are negatively motivated, that is, they cast votes to oppose candidates they do not like rather than to support the people for whom they actually vote.<sup>249</sup> Under this assumption, Sawyer won by presenting better arguments against her opponents than they did against her.

Another popular theory suggests the outcome was more straightforward. Historically, Independents have been the largest group of voters for decades,<sup>250</sup> yet most vote for a Republican or a Democrat even when they prefer a third-party candidate. Experts blame this behavior on modern polling practices. According to psychologists, when we cast a vote, we take the results personally.<sup>251</sup> Picking the winning side makes us feel victorious, and conversely, when we vote for someone who does not win, we feel a small sense of failure. When we want to support someone who we feel has no chance of winning, we avoid the future discomfort of picking a losing candidate by rationalizing our decision to go with our second choice, so we don’t “waste” our vote.<sup>252</sup>

When pollsters rank candidates, they do not ask, “Who would make the best president?” Instead they ask, “Which one will you likely vote for?” Many who prefer third-party candidates say they will realistically vote for someone else, and when other supporters see the dismal results, even more defect. The two major parties, with their pre-built base of voters, have never had to worry about this

phenomenon. However, low poll results create a self-fulfilling prophecy of failure for any candidate unable to achieve the critical mass required to escape this toxic spiral. As a result, the final tallies underrepresent the nation's true level of support for anyone who is not a Democrat or a Republican.

Political analysts say Sawyer's breakout performance in the debates led to a rare, sharp rise late in the election that bypassed the startup phase that kills most third-party candidates, and that once she accomplished that, the outcome was inevitable. In the 2036 election, over 80 percent of Democrats voted for Levinston, over 80 percent of Republicans voted for Brewer, and over 80 percent of Independents voted for Sawyer. In this light, the explanation is simple: Most people voted along party lines, including Independents behaving like an organized party, and there are more unaffiliated voters than there are Democrats or Republicans. In this case, Sawyer won by being the first third-party candidate in history to reach a position that made supporters feel their votes would not be wasted on her.

## **SAWYER'S PRESIDENCY**

While experts continue to debate the reasons behind her victory to this day, no one can dispute the fact that Sawyer has continued to break new ground throughout her administration. Apart from becoming the first female American president, Sawyer is also the first Independent elected to the office, a change that has fundamentally altered Washington politics. All past presidents have filled the White House with their allies, appointing only a token member or two of the opposing party as a nod toward bipartisanship. Untethered by party ties, Sawyer has

instead assembled the most politically diverse cabinet in history. Her team consists of a nearly even mix of Democrats, Republicans, and Independents, including her former opponents Jim Levinston and Gerald Brewer, who both accepted the posts Sawyer offered.

In 2037, Sawyer appointed Jared Lambreck, an Independent, to the Supreme Court. There he joined an even number of Republicans and Democrats, marking the first time in modern history that the nation's highest judicial body was not dominated by a major political party. This ended an era of predictable 5-4 rulings along party lines and ushered in a wave of cases previously held back to wait for more favorable conditions. Having nonaligned executive and judicial branches has been crucial to breaking through the gridlock between the uneven mix of Democrats and Republicans in the House and Senate. According to one pundit, the mingling of parties has led to the government "running more like a business, less like a high school ruled by cliques."

By her second year in office, Sawyer had passed a budget with deep spending cuts in all departments, which put the United States on track to eliminate its federal deficit by 2062. Along with the cuts, Sawyer's administration has also spearheaded several popular pieces of legislation, including those suggested by her former rivals. Brewer's plan to tighten national security passed essentially unchanged, and Sawyer's budget included funding for a handpicked list of the best of Levinston's public work projects.

Despite the cuts, Sawyer recently broke her one-term habit by being re-elected. Independent voters have historically tended to oppose whomever is in power,<sup>253</sup> leading to a

constant back-and-forth between the two major parties. With that dynamic gone, the first candidates to run against an incumbent Independent president found her almost impossible to unseat. In the last election, Sawyer won over half the popular vote as well as the biggest landslide of electoral votes since Franklin D. Roosevelt carried all but two states in 1936.<sup>254</sup>

Today Sawyer enjoys an approval rating that only dipped below 60 percent for a few months after she made the spending cuts, and she is still working to achieve her initial goal of tax reform. Experts have agreed that the plan on which she based her campaign would work, but since so many of America's largest corporations pay little or no tax today,<sup>255</sup> implementing it immediately would disrupt the world economy. Four years later, two similar tax simplification bills are making their way through both houses of Congress, both of which would gradually phase out personal income tax over the course of 20 years, replacing it with a consumption tax.

Under both bills, the length of the tax code would be ultimately reduced by over 90 percent, which would be a boon to small businesses and shrink the Internal Revenue Service by half. The shift in Washington toward bipartisan fiscal responsibility has finally allowed lawmakers to discuss eliminating tax loopholes without ending their careers. The extended timeframe has kept lobbyists from sinking the bill outright; however, only time will tell how many tax breaks are restored over the next two decades when the spotlight moves on to other topics. Nevertheless, Sawyer has set wheels turning that will remain in motion long after she leaves office.

Gone are the Nixon references; today people compare Sawyer to Abraham Lincoln, and not just because he also appointed several of his political opponents to his cabinet. More important, Lincoln unified a bitterly divided nation. Many historians mark 2001 as the beginning of a slow, bloodless civil war within the United States, when terrorist attacks left an indelible mark on Americans' attitudes. Sawyer likens the event to an unforeseen tragedy within a marriage, like the death of a child. The enormous strain creeps into every aspect of the relationship, heightening conflict and hampering reconciliation. Sawyer uses this marriage metaphor often. In fact, she credits her eight years working as a marriage therapist as more valuable to her role as president than her 22 years in state government. According to Sawyer, both jobs require tough love to find common ground between two parties with wildly different perspectives, both for their own mutual benefit as well as for the people who depend on them. In this case, the recovery has been unnecessarily difficult. For decades, those in power capitalized on the conflict by promoting an endless string of petty battles that divided the middle class against itself, distracting everyone while the world's largest corporations siphoned trillions out of the country's economy. Now, with a stable, growing market, a thriving middle class, and Republican and Democrat leaders who are genuinely working together, it appears we have finally put some of our worst years behind us.

Thanks to Apple, the Occupy movement, and the Tea Party, our future looks bright.



## EPILOGUE

### APPLE

Around the time Tim Cook took over, analysts predicted Apple would soon lose its early lead in tablet computing as more modestly priced competitors caught up.<sup>256</sup> For example, a month after Amazon released the *Kindle Fire*, it shot up to become the second-most desired tablet.<sup>257</sup> It was less than a quarter of the cost of a high-end *iPad 2*,<sup>258</sup> making it a more affordable gift for the average consumer,<sup>259</sup> and some predicted it would become the new standard.<sup>260</sup> The next year, software behemoth Microsoft released *Windows 8*, an operating system that worked on tablets as well as PCs, a late entry in an already crowded race that cut further into a market once controlled solely by Apple's *iOS* and Google's *Android*.<sup>261</sup> Similarly, *iPhone* sales, while solid in the US and UK, were falling in most of the rest of the world, where most people could not afford them and *Android* phones had already taken over.<sup>262</sup> Google was activating 700,000 *Android* devices a day<sup>263</sup> – and they were beating  *iPhones* in key areas.<sup>264</sup>

On top of increased competition, mounting scandals threatened to drive consumers away from Apple's strongest markets. While Cook did a good job of addressing the issues, he was fighting an uphill battle against becoming a scapegoat for the entire tech industry, taking the blame for decades of controversial business practices. The watershed moment came when Cook decided to throw his and Apple's support behind patriot duty, which, without their help, may have never become a mainstream success. By donating such massive amounts of equipment and

technology services, though, they allowed a grassroots movement to expand rapidly to include the entire nation, and to transform the political process while remaining completely independent of taxpayer-funded grants or government assistance.

The difference they made did not go unrewarded. Although Apple made no profit directly from the venture, the investment paid off handsomely. As it happened, the timing of patriot duty in 2015 dovetailed perfectly with the release of Apple's newest tablet. Two months before Christmas, a patriot duty media frenzy was well underway, and the *iPad 7* was the star of the show. As the world tuned in to watch this grand political experiment unfold, the tablet was featured prominently in dozens of major shows covering the event. Even local channels broadcast tutorials on the evening news to let viewers know what to expect at patriot duty meetings. The buzz helped make the *iPad 7* the single most desired item of the holiday season,<sup>265</sup> shattering Apple's already impressive sales records.

Cook's giveaway also helped increase awareness of Apple's new products and features. For example, the tablets sent to patriot duty participants came pre-installed with a one-year trial of *iLaCarte*, Apple's digital menu and restaurant management software. This helped Apple break into the retail management market, where it now enjoys roughly half of the market share. Also, patriot duty meetings put Apple's tablet into the hands of millions of consumers, showing them firsthand just how impressive the *iPad 7* was. It owed its newest improvements to *iCloud*, which Apple had recently expanded to deliver task execution in addition to the storage it had always provided. This upgrade allowed applications to tap into the raw

processing power of Apple's massive cloud computing network. Offloading the heavy lifting to Apple's servers dramatically extended the device's battery life while actually increasing performance. Raising the profile for *iCloud* helped Apple to compete with Amazon, the world's largest cloud computing provider, which was already making billions even though the market was only in its infancy.<sup>266</sup>

More than boosting short-term sales, though, Apple's foray into politics did long-term wonders for its brand. As the designers of the Public Record, Apple is still known today as the group of geniuses who did the impossible, who brought order to chaos, who got people to discuss politics in a reasonable manner, and by doing so breathed new life into the great experiment of democracy by giving ordinary citizens the power to right America's ship. Now that patriot duty has resulted in the election of the first Independent president, Apple has benefited yet again from a resurgent wave of publicity and gratitude.

As for Tim Cook, his giveaway cost him over \$150 million. This sum pales in comparison to his current fortune, but at the time it was almost half his net worth and required him to give up a substantial portion of the stock awarded to him when he became CEO.<sup>267</sup> This not only garnered an incalculable amount of public goodwill, but also cemented his place in history as a savior of democracy. Through this bold move, Cook established himself as a leader who knows how to use money, influence, and technology to solve complex social problems, and he has been a permanent fixture on the global political stage ever since. Shortly after Colette Sawyer was elected, Cook talked about his decision to get involved in an interview:

*...it's just that the way we were doing things was so primitive, I couldn't help but get involved.*

*Here we were, in the twenty-first century, still using a system over 200 years old. I mean, the fundamentals were sound, but if the Founding Fathers had iPads and the internet, do you honestly think they would have designed the government around the limitations of horseback travel?*

*Then, along came patriot duty.*

*Now, in this business, you hear a lot of ideas. The problem is, too many of them begin with, "Wouldn't it be great if..." or end with, "If we could just figure out a way..."*

*We have a saying around here: "Real artists ship."*

*Ideas are great, but execution is what changes the world. And at the end of the day, you have to make something that works.*

*Patriot duty, though, here was a solid idea, one that could actually make a big difference, because it pushed the limits but still played by the rules – it worked with the government we had, not some idealistic fantasy. It could succeed – all it needed was help getting started, and we were in a position to provide it. You really give me too much credit – we just gave it a little push – the American people did all the work.*

## THE OCCUPY MOVEMENT

In the middle of a cold November night in 2011, hundreds of New York City police officers staged a surprise raid to remove all protestors from Zuccotti Park, where the original Occupy Wall Street protest had been located for two months. In a disturbing move, the police blocked the news media from covering the raid.<sup>268</sup> However, plenty of

startling acts of police brutality were still caught on camera.<sup>269</sup>

Later that day, the gruesome image of an 84-year-old woman pepper-sprayed at a protest in Seattle went viral.<sup>270</sup> Two days later, a police officer approached a group of UC Davis students sitting peacefully and casually doused their faces with an oversized tank of pepper spray.<sup>271</sup> Multiple onlookers recorded the event from different angles and published their videos on YouTube, which were seen by millions.<sup>272</sup> That same day, another video surfaced that showed a police officer in Oakland approaching an Iraq war veteran who was doing nothing more than walking by a protest, then beating him so hard that his spleen ruptured.<sup>273</sup> And this came just a week after police at UC Berkeley were filmed savagely beating students with batons, again with no apparent provocation.<sup>274</sup> Many said such heavy-handed action was uncalled for.<sup>275</sup> However, what sympathy the movement received<sup>276</sup> was lost with incidents of flag-burning<sup>277</sup> and growing resentment over the mess left behind by occupation protests.<sup>278</sup>

At this time, the Tea Party had been going strong for years and had made deep inroads in Washington, but the Occupy movement had made little lasting impact and was already losing steam just months after it began. Supporters had plenty of reasons to be discouraged. Occupiers faced bitter cold, internal division, and violent clashes with the police that had already resulted in thousands being arrested and hundreds more injured.<sup>279</sup> Yet for all their trouble, their protests were not changing public opinion or even raising awareness.<sup>280</sup> Even their supporters said that the Occupiers' fatal weakness was the age-old criticism of

American liberals: They were too disorganized to be effective.<sup>281</sup>

Whereas the Tea Party, on the other hand, had thrived with no central leadership, the Occupy movement was in danger of fizzling out into a forgotten historical footnote. Although the two movements started in similar ways,<sup>282</sup> their viewpoints couldn't have been more different on most social issues. However, they could agree on one thing: The status quo in Washington was unacceptable. Both groups felt that the election process was flawed, that the typical American was unrepresented in government, and that rich donors and lobbyists had too much influence on shaping policy.

Patriot duty unified these two movements under a common cause. Even though the idea originated with the Tea Party, it actually ended up helping the Occupy movement even more, because it let the Occupiers benefit from the Tea Party's organization. Patriot duty focused their fury into actions that were more productive than protests. Whether they were improving software, recruiting new participants, or checking facts on the Public Forum, Occupiers could contribute, confident that they were making a meaningful difference, and without fear of police action.

By 2015, public opinion of the movement had turned from disapproving apathy into glowing mainstream support, and not just in the United States, but around the world. In truth, the Occupy movement was never just an American phenomenon. The original Occupy Wall Street protest was planned by a Canadian advertising firm, was modeled after the Arab Spring protests, and was dwarfed by similar protests in other countries.<sup>283</sup> Today, what began as #OWS

has become #OLM: Occupent le Monde, a network of affiliated groups around the world dedicated to solving the problems caused by financial inequality through non-violent actions. Back in the United States, though, the movement ended up walking hand-in-hand with capitalism down a very different path.

## **HARNESSING THE BEST OF INTENTIONS**

In the upper ranks of the philanthropic community years ago, one sad fact was well-known, but rarely discussed above a whisper: Most common grassroots efforts were worthless. In fact, many misguided helping hands did more harm than good. Environmentalists campaigned to encourage people to buy local crops, even though it was actually more ecologically friendly to grow them in more ideal regions farther away.<sup>284</sup> Animal rights activists circulated petitions for laws that left some poor creatures in worse shape than before.<sup>285</sup> After an earthquake rocked Haiti in 2010, volunteers poured in who didn't know how to help in a disaster, didn't even speak the native language, and ended up becoming a burden themselves.<sup>286</sup> Others held collection drives for supplies that no one needed. Bags of donated high heels were delivered to villages in the forest.<sup>287</sup> Loads of winter coats were sent, even though the island nation never gets cold.<sup>288</sup> Ten freight containers of donated refrigerators arrived, useless since they required a different voltage.<sup>289</sup>

Unfortunately, this was nothing out of the ordinary. Common donations hurt more than they helped, and could cost a hundred times their value to be transported.<sup>290</sup> Ultimately, most donated food items and clothes were thrown away.<sup>291</sup> What made it through often made little difference other than putting local manufacturers and

farmers out of work.<sup>292</sup> Despite the best of intentions, due to bad planning, many humanitarians unknowingly damaged the causes they cared about the most.

This is precisely what held back the Occupiers in the very beginning. Their prolonged protests had almost no effect on the lawmakers and organizations they blamed for the economic meltdown, and they accomplished little more than to turn public opinion against them. After they shifted their attention to patriot duty and the Public Record, though, they made a real difference, as they saw populist representation in government increase as a direct result of their efforts.

## **GOING FORTH AND DOING GOOD**

Inspired by how much the Occupiers were able to accomplish with better direction, in 2016 a group of philanthropic venture capitalists sought to make lightning strike again by founding Godo, Inc. Godo consists of two affiliated non-profit organizations, GlobalOccupation.org (GO) and DomesticOccupation.org (DO), which focus on international and local issues, respectively. Their goal: To make volunteer efforts more productive by solving the strategic problems that plague most grassroots efforts.

To accomplish this, Godo recruits seasoned professionals from all levels of business, from international bank managers to local auto dealership owners, to donate something more valuable than a check: expertise. Godo asks these executives to commit to a yearlong tour of duty as a GM (“Godo Mentor”), during which they will spend about eight hours a week serving as management consultants, providing much-needed guidance to humanitarian efforts.



Godo also maintains a worldwide suggestion forum, whereby any Occupier can propose an idea for a charitable endeavor, whether it is on a local, national, or international scale. Through community ranking, popular ideas bubble up to the top, where a mix of GMs in various fields analyze them. The majority of ideas have some fatal flaws and are sent back for revision along with suggestions for improvement. Ideas with more potential are handed off to other GMs, who help work out the finer details and draft an execution plan. When a good idea gains consensus from enough GMs, they award it the iconic “Godo Green Light,” then begin helping Occupier community leaders parcel out jobs to volunteers based on their individual abilities.

Illustration: The Godo Green Light



The Godo process challenges activists to think harder, to go back to the drawing board and plan carefully instead of marshaling overeager forces in the wrong direction. When Godo says, “Go forth and do good,” it is more than just a slogan; it is a public decree. Godo-Approved Projects, known as GAPS, gain an enormous boost in credibility. After all, the Green Light shows that a charitable venture has been carefully reviewed by a respected think tank. Grassroots organizations work hard to earn it, because Godo’s stamp of approval lets volunteers know that the

operation will run smoothly and gives potential donors confidence that their money won't be wasted. In fact, the first question most philanthropic organizations ask before giving to a cause is whether or not it has attained GAP status. Likewise, charitable crowdfunding efforts rarely succeed without first being reviewed by Godo experts.

Godo's structure is too transparent and diverse to allow any special interest to exert undue influence, which gives Occupiers an edge over slick corporate philanthropy programs that do more to boost a company's image than to help others. Plus, the experience gives enterprising altruists extraordinary networking opportunities with the powerful professionals who serve as mentors. The business world is always looking for people with good ideas, people who know how to solve difficult problems and get things done. By attracting these people, Godo has become a renowned talent pool. In addition to the satisfaction of a job well done, the Occupiers who lead successful programs can usually take their pick of job offers from socially conscious companies.

In an interview, one of Godo's founders said the name came from an altercation with an Occupier near his office:

*Here's this guy who doesn't know the first thing about me or my business, but because I am wearing a suit he's blaming me for everything that's wrong in his life. I yelled right back at him, "What does 'occupy' even mean anyway? To take up space. That's all you're doing. You are accomplishing nothing. If you want things to change, go do something about it." This guy looked like he wanted to rip my head off, and when I saw that passion, that energy, I thought to myself, "What if he actually did go do something about it?" It was at that moment that I had the idea [for Godo].*

Soon Godo was helping the Occupiers to channel their discontent into more constructive activities than staging protests that largely fell on deaf ears. By doing so, it has redefined what it means to “occupy,” changing the movement from one of protest to one of participation, an idea summed up by the quote painted on the wall behind the reception desk at Godo headquarters:

*The pessimist complains about the wind; the optimist expects it to change; the realist adjusts the sails.*

– William Arthur Ward

If you had told the first Occupiers who set up camp in Zuccotti Park that they would soon be cooperating with the Tea Party, they probably would have laughed. If you went on to say that soon thereafter they would start working with the largest corporations in the world, they probably would have called you crazy. The Occupy movement was nearly just a flash in the pan, yet by teaming up with two groups that they previously saw as enemies, together they were able to make a real difference. From protests to patriot duty to public service, the Occupy movement has evolved into one of the most respected groups for idealists who want to improve the world around them. As one commentator put it:

*The richest were getting richer, and the rest weren't. Collectively, it was a problem, but individually, were we supposed to punish people for making good business decisions?*

*Finally, through the Occupy movement, we got a compromise: a way for the 1% to help the 99% help themselves ... and one of the only good things to come out of the Great Recession.*

## THE TEA PARTY

In the very beginning, the Tea Party was composed primarily of conservative Republicans,<sup>293</sup> and as would be expected, they held conservative social views. Many of these opinions, though, had nothing to do with the goals of the movement, which were primarily to promote fiscal responsibility and limit the federal government to its constitutionally defined roles. However, the media associated the Tea Party with its members' social views, which turned off moderates and liberals, many of whom would have agreed with the fundamental tenets of the movement had they given the Tea Party a chance.

This changed abruptly when the Tea Party introduced patriot duty. The concept was the epitome of real grassroots activism and appealed to populists of all walks of life, particularly younger voters. This triggered a massive influx of new members, doubling the movement's size within 18 months. By the end of 2016, Republicans no longer made up the majority of the Tea Party. Alongside them, over a third were Independents and another fifth were Democrats.

The Tea Party we know today looks nothing like it did 30 years ago. In its infancy, the movement was perceived as a fringe group of right-wing extremists who were too conservative for even the Republican Party. In one 2010 poll, only 6 percent of registered Democrats said they agreed with the Tea Party movement.<sup>294</sup> It was forgivable for outsiders to think the Tea Party was for Republicans only, considering they backed well over a hundred Republican candidates for Congress in the 2010 mid-term election, but essentially no Democrats.<sup>295</sup>

However, as the Democrats learned, the movement was neither that simple nor that shallow. Tea Party members had a wide variety of opinions, but they were all unified by a dissatisfaction of the current government.<sup>296</sup> They were not anti-Democrat; they were against the fiscally irresponsible abuse of power. And it just so happened that when the movement formed, the Democratic Party controlled both houses of Congress as well as the White House. The Tea Party backed so many Republicans in 2010 in part because that was the only way to bring change.

However, a schism between the two groups began to form shortly thereafter when the Republicans the Tea Party supported did not vote according to the principles upheld by the people who helped get them elected – namely when they did not cut spending like they promised,<sup>297</sup> when they failed to defund military action in Libya despite the lack of congressional approval,<sup>298</sup> and especially when they voted to raise the federal deficit limit, a move opposed by virtually all Tea Party members, according to Meckler.<sup>299</sup> When they started opposing Republicans, it got the message across to Democrats and Independents that the Tea Party was not an extension of the Republican Party, but something completely different. Also, by introducing patriot duty, the Tea Party attracted a much broader spectrum of people than it had in the past.

Today the Tea Party's demographics show it is close to being a cross-section of the country, as Independents outnumber Republicans and Democrats. For over 30 years, the Tea Party has mostly stayed out of social matters, sticking to its founding principles of economic responsibility and constitutionally limited government. The Tea Party promotes these ideals, but no longer

endorses specific candidates other than those selected through patriot duty – a practice many members disagreed with from the beginning.<sup>300</sup>

These days, the Tea Party is widely regarded as the largest, most legitimate grassroots political organization. Local Tea Party chapters hold a place in their community alongside other respected service organizations. Participating is regarded as patriotic, and is no more controversial than volunteering for the local Rotary or Lions Club. Chapter meetinghouses are known as places where anyone can engage in a civil conversation about politics. Members no longer ask for donations outside grocery stores. Instead, they hold pancake breakfasts and ice cream socials, where all are welcome and the proceeds go to fund the Public Forum and the travel expenses of patriot duty finalists. These events are popular ways to socialize while conspicuously displaying support for the vital functions the Tea Party provides to American society.

As steward of the Public Record, the Tea Party helps maintain the tool that facilitates our most important discussions as well as holds politicians accountable for their words and actions. The PRPP also serves as a collective consciousness for the nation. A glance at the top positions shows what is on the minds of the masses, which helps us keep perspective in this age of personalized news reports. Originally designed to balance talking points for discussions between twelve random people, the Public Record has evolved into an instrument that finds truth and consensus among the inhabitants of an incredibly diverse nation.

As the facilitator of patriot duty, the Tea Party serves as a bastion against the culture of corruption in Washington.

Ronald Reagan once said, “Concentrated power has always been the enemy of liberty.” He also said, “The best minds are not in government. If any were, business would hire them away.”<sup>301</sup> Patriot duty has proven there are amazing leaders among us. While some gravitate toward government, most never choose to go into national politics on their own. Patriot duty has a knack for finding these people and pressing them into service. Just as television talent shows have discovered mind-bogglingly gifted singers living otherwise ordinary lives, patriot duty regularly searches the nation to unearth presidential gems in the rough. It gives them the credibility and name recognition to be serious contenders against established politicians, providing an alternate track to political success that circumvents the major parties. Wise people had said an Independent president would never be elected, and even if it happened, it would be a disaster.<sup>302</sup> But patriot duty proved them wrong, paving the way to break the two-party system’s stranglehold on the political process.

The Democrats and Republicans are still the two dominant forces in American government, but the Tea Party continually pumps new blood into the system. Reaching the sixth round of patriot duty means a person has been chosen as the best of a quarter million local citizens, and has been the launchpad for many successful congressional campaigns. Due to the influx of Independents, neither major party has controlled more than half of the House or Senate since 2028. Although their numbers are few, these Independents play a critical role in the balance of power. No longer can Democrats act with *carte blanche* because they have two more Senators, nor are Republicans’ hands tied when they are a few seats behind. Either party can move legislation forward, but only by working with peers

outside their own groups, which has led to measured, lasting progress, replacing the pass-and-repeal pattern that repeated every time the government changed hands.

Patriot duty's steady output of impressive candidates has also forced the major parties to rethink their campaign strategies. Since the Tea Party made Independents viable, many Republicans and Democrats have toned down their extreme positions and now actively court the majority in the middle they used to ignore. They also pay more attention to their constituents than to their corporate sponsors, because if they don't, they know that now someone else will.

Founded in fiscal responsibility, the Tea Party serves as the champions of the common citizen, the watchdogs of the government, a counterweight to the political establishment. As one commentator put it, "The Public Record keeps politicians honest, and patriot duty keeps them on their toes."

## **ETHAN BEAUDREAU AND OTTO SCHOLZ**

As for one of the original creators of patriot duty, Ethan Beaudreau has spent the better part of his life sharing what he learned building applications for the Tea Party. Since both *PatriotDuty.org* and *prpp.org* were developed as open source software, it was easy for others to create similar systems.

Most countries have their own version of the Public Record now, and Beaudreau helped set up over a dozen of them. He spent seven years working on his largest project, *EPIcentr.es*, a global version of the Public Record that the



United Nations uses for discussing international treaties and disputes.<sup>303</sup>

Beaudreau also helped create two other applications based on the concept of progressive selection. The first, *ProgressiveSelection.org*, allows any organization to set up its own, private version of patriot duty to select leaders. Selection, rather than election, is now the most popular method for choosing student government representatives at American colleges, and is being used increasingly by school boards, city councils, clubs, unions – practically any group that practices self-governance by its members.

Beaudreau designed the other application, *OpenElection.net*, to facilitate large-scale elections. Using this system, governments can create custom processes that blend elements of election and selection to match their own laws and customs. The platform is hardware-independent and enables voting from a wide range of devices, which is particularly important in developing nations where personal computers are still rare, but mobile phones are ubiquitous. *OpenElection.net* saves billions in infrastructure costs. In addition, since it is administered and monitored by an independent community of professionals around the world, it eliminates questions of vote-tampering, corruption, and fraud. Since American elections are governed at the state level, the US has been slow to adopt the system, but many countries now use it, the most recent being Egypt and Iceland.

In recent years, Beaudreau has taken a break from politics to find other uses for the software he helped create. He co-founded *Quaerere Verum* (Latin for “to seek truth”), a community for intellectuals that uses a version of the Public Forum, with an emphasis on The Grinder, to debate

scholarly matters. Instead of political topics, the application is divided up by fields of study. For example, philosophers use it to argue about abstract concepts, theologians use it to compare religious beliefs, and scientists use it to dissect competing theories and standardize experimental procedures. His latest project, *Roulettorama.com*, adapts the patriot duty process in its popular *Dating by the Dozen* app, which collects local singles into groups of twelve, coordinates a group blind date at a popular hangout, then uses the meeting software to lead them through icebreakers and social games.

Beaudreau also travels the globe, giving lectures and promoting the principles of these systems for people who wish to follow in his footsteps. The following is a transcript from one of his presentations:

*Why did patriot duty work?*

*Number one: It was innovative.*

*I have to say again that many, in fact, most of the ideas behind patriot duty were not mine. I was lucky to be in the right place at the right time. Much like patriot duty was the right idea at the right time.*

*Politically, it was part of a confluence of events that have preceded revolutions throughout history. This included a leader with fading popularity, a non-united opposing party, a weak economy, hostile partisanship, and widespread dissatisfaction with and mistrust of the government.*

*But technologically, the idea was revolutionary at the time. The required elements had only been around a short while. Patriot duty combined unlimited video hosting, reliable local restaurant reviews, widespread wireless internet access (and data on where it was available), powerful mobile devices, and a massive political movement interested in bucking the system.*

*We did not invent much. All those pieces already existed; we just put them together in an innovative way.*

*Number two: It was local.*

*The closer you bring an issue to people's homes, the more interested they will be. It's hard to get more local than twelve people meeting at a nearby restaurant. People donated because they were sending their neighbors onward to represent them. But along with being local, you still have to be impactful. If you want to start a grassroots movement, it has to actually make a difference.*

*Anyone who participated in patriot duty this year can start with a video of their own first meeting, and within six taps, see a chain of meetings that leads to President Sawyer. Patriot duty empowered people to do something locally that had an impact on the nation they could see and feel.*

*Number three: It was easy.*

*Signing up is simple – all it takes is an email address. You get to pick a convenient time, and for most people, patriot duty takes only a couple of hours every four years.*

*Note that it isn't too easy: It takes more effort than voting. The extra time requirement filters out people who don't actually care, and the meeting beforehand puts people in a thoughtful frame of mind before asking them to make important decisions.*

*Number four: It was free.*

*Inconvenience is a huge barrier to participation, but cost is even bigger. Not that large systems can't generate a profit, but in order to catch on quickly, they have to allow people to participate in a meaningful way for free. You're not going to get hundreds of millions of people to walk through any door if there's a cover charge just to get in.*

*In this case, the goal was finding leaders, not making money, so no one tried to twist the process to turn a profit. Which leads me to the most important point.*

*Number five: Patriot duty worked because it was open.*

*It's open in two ways. First, it's open to everyone. We didn't restrict it to just members of the Tea Party. The whole process embodies the American dream. We had been told as kids that anyone could become president, but that wasn't actually true. Look who was elected before patriot duty – for hundreds of years it was an elitist oligarchy. Now, we can tell our kids that anyone can become president and mean it.*

*Finally, the entire system is open. We made the software open source. Anyone can watch any meeting. It's publicly audited. Every part of the process is completely transparent. There can be no backroom deals. No corporate influence. You can't stuff the ballot box with phony votes. This openness means there is no way to game the system.*

*It's also open in that it is self-managing and self-sustaining. For a system like this to last, it can't be directed by an outside source, because that force will always end up influencing the system according to its agenda. You need to build self-propelled perpetual motion machines and let them go where they will.*

*For patriot duty, the Tea Party just keeps the applications up and pays for travel expenses. If patriot duty is a car, then the Tea Party built it and keeps it full of gas, but the community decides where to go and steers it. You can start by pointing it in the right direction, but that's it. If you want a movement to go anywhere, you have to be willing to let go of the wheel.*

As for Otto Scholz, patriot duty was the last invention of his career. After four years of working with Beaudreau, most of which he spent perfecting The Grinder, he retired again, this time for good.

Scholz wrote two books: *Changing the Game*, his autobiography, and *A Devil on Each Shoulder*, a political commentary about the weaknesses of the two-party system. The first words of the latter book explain his motivation for creating patriot duty:

*When faced with two bad options, we should not choose the lesser of two evils. The proper course is to find a better option.*

Since then he has been enjoying a well-deserved break. In an interview, he said:

*I'm seeing the world, I'm learning to paint, I'm still getting to know my wife. We've been together for almost 70 years, but for most of that time, I was actually married to my job. Don't make the same mistake.*

Scholz says he could not be prouder of the Tea Party for its accomplishments.

*With the Public Record, they have created an environment in which falsehoods cannot survive. When you see the little "TM" by something, you know it is trademarked. When you see the little "UM" by something, you know it is true. [A reference to the symbol used to denote data from United Metrics.] That is wonderful. People don't remember what it used to be like before, when we never knew what to believe.*

At 98, Scholz is pleased to have lived to see Colette Sawyer become president, although he downplays the significance of her gender:

*People always focus on that. So we elected a woman. Big deal. That is not an accomplishment. Electing a woman was inevitable. Long overdue. Look at India. Brazil. Of course, Germany – much of Europe, in fact –*

*they all elected female presidents before we even started patriot duty. Well, in Germany, it is actually the chancellor that matters, but you get the idea. It was going to happen.*

*No, the real accomplishment was electing someone who was not a Republican or a Democrat. Someone who did not follow the party line. Someone who was not the product of years of corruption. Someone who was not a wholly owned subsidiary of the banks. That was the real accomplishment.*

*And for once, we didn't elect the guy who looked the best on the TV. We elected the leader we needed, and it never would have happened without the Tea Party, without the Occupiers, without Apple and Tim Cook and Ethan, without everyone finally putting their differences aside and doing what was right for the country.*

## AUTHOR'S NOTE: THANK YOU

Thank you very much for taking the time to read this book; I hope you enjoyed it. If you did, you may want to read the other books in the *Tales from 2040* series included in this collection:

Jump to [\*Tale #002: How Lady Gaga fought crime, AIDS, and abortion rates\*](#)

Jump to [\*Tale #003: How Facebook beat the banks and raised an army of new volunteers\*](#)

Also, if you feel the ideas in this book are worth sharing, here are some ways you can get involved:

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You can share this book with the following link:

<http://2040.net/001>

### JOIN THE DISCUSSION

You are also invited to discuss your vision of a brighter future on the 2040 Network forum:

<http://2040.net/work>

There, the 2040 Network is forming to discuss these books and develop new strategies for charitable capitalism. I hope to see you there, and I welcome your questions, comments, criticism, and creative ideas.

## FUTURE TALES FROM 2040

The working titles for the next books planned in the *Tales from 2040* series are:

*How Google revolutionized the food industry*

*How Amazon made manufacturing greener*

*How Wal-Mart saved American health care*

*How Microsoft fought poverty and made us all smarter*

If you feel the *Tales from 2040* series is socially beneficial, find out how you can contribute to new books and help us create a brighter future by visiting:

<http://2040.net>



## ABOUT THE AUTHOR

Born in 1979, Christopher Cardinal grew up in rural Nevada and now lives in San Diego, where he works at a marketing and technology consulting firm he started in 1993.



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Doug Palmer, John Poirier. (2012) “Senator Presses Tech Firms on Practices in China.” Reuters. Feb. 3, 2012. [Link](#)
30. Mark Shields. (2012) “Apple Vows to Protect Workers in Chinese Factories.” Change.org. Apr. 4, 2012. [Link](#)
31. Benjamin Coghlan, Pascal Ngoy, Flavien Mulumba, Colleen Hardy, Valerie Nkamgang Bemo, Tony Stewart, Jennifer Lewis, Richard Brennan. (2007)

“Mortality in the Democratic Republic of Congo: An Ongoing Crisis.” International Rescue Committee. New York, NY.

32. Charles Duhigg, David Barboza. (2012) “In China, Human Costs Are Built into an iPad.” The New York Times. Jan. 25, 2012. [Link](#)

33. Charles Duhigg, Keith Bradsher. (2012) “How the U.S. Lost Out on iPhone Work.” The New York Times. Jan. 21, 2012. [Link](#)

34. Paul Krugman. (1997) “In Praise of Cheap Labor.” Slate. Mar. 21, 1997. [Link](#)

35. A major point of this paper is that these concepts are very difficult for non-economists to understand.

Paul Krugman. (1996) “Ricardo’s Difficult Idea.” Paper prepared for the Manchester Conference on Free Trade, Mar. 1996. [Link](#)

36. Just how high the wages were depends on the year, since Foxconn more than doubled wages between 2010 and 2012, and promised to double them again by the end of 2013, when they will be paying entry-level labor more than entry-level graduate students at its headquarters. Also, Shenzhen, where Foxconn’s largest factories are located, has the highest statutory minimum wage in China.

Cyrus Lee. (2012) “iPhone Manufacturer Foxconn to Double Worker Salaries by 2013.” ZDNet. May 29, 2012. [Link](#)

Interestingly, some have said that due to improvements, Foxconn interns are now treated better than most interns at US companies.

Austin Carr. (2012) “Are Foxconn Internships Now Better Than American Internships?” Fast Company. Aug. 22, 2012. [Link](#)

37. About three-quarters of those who assemble electronics in Vietnam are female. Wage comparisons based on the average of reported minimum wages using international exchange rates. Caveat: Cost of living is also much lower in this area.

Anna Kakuli, Irene Schipper. (2011) “Out of Focus - Labour Rights in Vietnam’s Digital Camera Factories.” Centre for Research on Multinational Corporations. Amsterdam, Netherlands.

38. Most popular based on subsequent downloads.

Eyder Peralta. (2012) “‘This American Life’ Retracts Mike Daisey’s Apple Factory Story.” NPR. Mar. 16, 2012. [Link](#)

39. Greg Sandoval. (2012) “Was Apple Protest Leader Mark Shields an ‘Accidental Activist?’” CNET. May 3, 2012. [Link](#)

40. It is not as if working conditions in Asian factories do not live up to American standards, but exaggerating to call attention to an issue undermines the truth.

Ira Glass. (2012) “Retracting ‘Mr. Daisey and the Apple Factory.’” This American Life. Chicago Public Media. Mar. 16, 2012. [Link](#)

41. One article reported 728 industrial injuries in five months for the Foxconn factories in Shenzhen, which have a workforce that is estimated at 500,000. This is a rate of .35 per 100 people per year, whereas the workplace injury and illness rate for American manufacturing workers is over 12 times higher at 4.4 per 100 per year.

As the article stated, this number may be underreported due to financial incentives for management to not report injuries; however, similar incentives exist in America as well. A concrete comparison cannot be made because the extent of unreported injuries in both countries is unknown.

Juliette Garside. (2012) “Apple’s Efforts Fail to End Gruelling Conditions at Foxconn Factories.” The Guardian. May 30, 2012. [Link](#)

Bureau of Labor Statistics. (2011) “Private Industry Workplace Injuries and Illnesses Decline in 2010.” US Department of Labor. Washington, DC.

42. Associated Press. (2012) “Suicides Are Surging among US Troops, Pentagon Statistics Show.” Fox News. Jun. 8, 2012. [Link](#)

Staff Reporter. (2012) “US Military Suicide Rate Hits One per Day.” BBC News. Jun. 8, 2012. [Link](#)

Alexander Abad-Santos. (2012) “Suicide Has Killed More Troops Than the War in Afghanistan This Year.” The Atlantic. Jun. 8, 2012. [Link](#)

Staff Reporter. (2012) “Surge in Suicides among US Soldiers.” Al Jazeera. Jun. 8, 2012. [Link](#)

43. As of May 16, 2012, there were approximately 87,000 US troops in Afghanistan.

Ian Livingston, Michael O’Hanlon. (2012) “Afghanistan Index.” The Brookings Institution. Washington, DC.

44. United States Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics. (2012) “Armed Forces Strength Figures for March 31, 2012.” US Department of Defense. Washington, DC.

45. The news articles cited above were all based on the same statistic, which was that there had been 154 suicides in the first 155 days of the year.

However, considering the size of the military, this represents an approximate rate of 25.0 suicides per 100,000 people per year. In 2009, the rate of suicide among American men ages 18-64 was nearly identical at 24.2 per 100,000.

Calculations based on the following figures:

1,452,939 total active-duty military personnel in 2012.

United States Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics. (2012) “Armed Forces Strength Figures for March 31, 2012.” US Department of Defense. Washington, DC.

23,362 suicides among American males ages 18-64 in 2009.

Centers for Disease Control and Prevention. (2012) “10 Leading Causes of Deaths, United States: 2009, All Races, Males, Ages: 18-64.” Web-based Injury Statistics Query and Reporting System. [Link](#)

96,447,632 total American males ages 18-64 in 2009.

US Census Data. (2011) “2009 American Community Survey 1-Year Estimates.” Table B01001. United States Census Bureau. Washington, DC. [Link](#)

Different age ranges produce different results; however, suicide rates are fairly high among young males. For example, suicide was the second-leading cause of death among males 18-34 in 2009.

Centers for Disease Control and Prevention. (2012) “10 Leading Causes of Deaths, United States: 2009, All Races, Males, Ages: 18-34.” Web-based Injury Statistics Query and Reporting System. [Link](#)

Also, statistics for males were used for simplicity, as active-duty military personnel are over 85% male.

Office of the Deputy Under Secretary of Defense. (2010) “Demographics 2010: Profile of the Military Community.” Department of Defense. Washington, DC.

46. World Health Organization. (2011) “Suicide Rates per 100,000 by Country, Year and Sex.” World Health Organization. Geneva, Switzerland.

Centers for Disease Control and Prevention. (2010) “Suicide: Facts at a Glance.” Centers for Disease Control and Prevention. Atlanta, GA.

For example, the suicide rate for non-Hispanic whites in America from 2005-2009 was 15.99 per 100,000.

Centers for Disease Control and Prevention. (2012) “Suicide Rates Among Persons Ages 10 Years and Older, by Race/Ethnicity, United States, 2005–2009.” Centers for Disease Control and Prevention. Atlanta, GA.

Caveat: If comparing only suicides that took place at the workplace, the rate at Foxconn is much higher than in America.

Bureau of Labor Statistics. (2009) “Occupational Suicides: Census of Fatal Occupational Injuries.” US Department of Labor. Washington, DC.

However, there are important cultural differences to consider, since the suicides at Foxconn were reported to be, in part, a protest against low wages, which is all but unheard of in the US. Even more significant is the fact that Foxconn workers typically live in on-campus dormitories which blur the line between home and work, meaning that workers are essentially always at work, leading to a far greater share of suicides both occurring at as well as being reported to have occurred at Foxconn.

47. Mark Wilson. (2012) “iKill’ Infographic Charts the Human Cost of the iPhone.” Fast Company. Mar. 2, 2012. [Link](#)

48. Malcolm Moore. (2012) “‘Mass Suicide’ Protest at Apple Manufacturer Foxconn Factory.” The Telegraph. Jan. 11, 2012. [Link](#)  
 Associated Press. (2012) “Chinese Foxconn Workers Threaten Mass Suicide Over Xbox Layoffs.” The Global and Mail. Jan. 12, 2012. [Link](#)
49. Barry Berman. (2010) “Competing in Tough Times.” Financial Times Press. Upper Saddle Creek, NJ.
50. Brooke Crothers. (2012) “Won’t Buy Apple Products Anymore? Then Don’t Stop There.” CNET. Jan. 29, 2012. [Link](#)  
 Joshua Greenman. (2012) “Apple, Foxconn and Your iPhone.” New York Daily News. Feb. 2, 2012. [Link](#)
51. Peter Elkind. (2008) “The Trouble with Steve Jobs.” Fortune. Mar. 5, 2008. [Link](#)  
 Commentary:  
 Leander Kahney. (2010) “Does Steve Jobs Care about Global Poverty?” Cult of Mac. Jun. 3, 2010. [Link](#)
52. Brian Caulfield. (2011) “Apple Crushes Estimates; Posts 125% Earnings Jump; iPad Sales Up 183%; iPhone Sales Up 142%.” Forbes. Jul. 19, 2011. [Link](#)  
 Q1 2012 (which, for Apple, includes the 2011 holiday season, over which Jobs’ work still had much influence):  
 Eric Savitz. (2012) “Apple: FY Q1 Crushes Street Ests; Revs \$46.33B; EPS \$13.87; 37M iPhones; 15.4M iPads; Cash Now \$97.6B; Stock Soars.” Forbes. Jan. 24, 2012. [Link](#)
53. Andrew Ross Sorkin. (2011) “The Mystery of Steve Jobs’s Public Giving.” The New York Times. Aug. 29, 2011. [Link](#)
54. Leander Kahney. (2006) “Jobs vs. Gates: Who’s the Star?” Wired. Jan. 25, 2006. [Link](#)  
 James Altucher. (2011) “10 Unusual Things You Didn’t Know about Steve Jobs.” The Huffington Post. Aug. 24, 2011. [Link](#)  
 Andrew Ross Sorkin. (2011) “The Mystery of Steve Jobs’s Public Giving.” The New York Times. Aug. 29, 2011. [Link](#)
55. Andy Beckett. (2010) “Inside the Bill and Melinda Gates Foundation.” The Guardian. Jul. 12, 2011. [Link](#)  
 At the time, technically, the Stichting Ingka Foundation may have been the largest “charity” in the world, although some said it was little more than a tax shelter for IKEA’s profits.  
 Staff Reporter. (2006) “Flat-Pack Accounting.” The Economist. May 11, 2006. [Link](#)
56. Bill Weir. (2012) “Bill Gates on Using His Money to Save Lives, Fixing U.S. Schools, Reflecting on Steve Jobs.” ABC News. Jan. 24, 2012. [Link](#)

John Pavlus. (2012) “Infographic of the Day: Bill Gates Is a Better Superhero Than Batman.” Fast Company. Jan. 20, 2012. [Link](#)

57. Bill Gates was the world’s richest person for 14 of the 15 years between 1994 and 2009.

Matthew Miller, Luisa Kroll. (2010) “Bill Gates No Longer World’s Richest Man.” Forbes. Mar. 10, 2010. [Link](#)

58. Stephanie Strom. (2010) “Pledge to Give Away Half Gains Billionaire Adherents.” The New York Times. Aug. 4, 2010. [Link](#)

Giving Pledge, LLC. (2011) “Directory [of Donors].” GivingPledge.org. Dec. 31, 2011. [Link](#)

Michelle Nichols. (2010) “Warren Buffett, Bill Gates Ask Billionaires to Give Away Wealth.” Reuters. Jun. 16, 2010. [Link](#)

Luisa Kroll. (2012) “The Giving Pledge Signs On 12 More Wealthy Americans Including Tesla’s Elon Musk and Home Depot’s Arthur Blank.” Forbes. Apr. 19, 2012. [Link](#)

59. Andrew Ross Sorkin. (2011) “The Mystery of Steve Jobs’s Public Giving.” The New York Times. Aug. 29, 2011. [Link](#)

60. Steve Slater. (2011) “Apple is Worth As Much As All Euro Zone Banks.” Reuters. Aug. 19, 2011. [Link](#)

61. Notably Denmark, Greece, and Finland. Exceptions included Austria, Norway, Belgium, Poland, Sweden, Switzerland, Turkey, Netherlands, Spain, Russia, Italy, United Kingdom, France, and Germany. Comparison based on data from:

International Monetary Fund. (2012) “World Economic Outlook Database.” International Monetary Fund. Washington, DC. Jan. 24, 2012.

Charley Blaine. (2011) “How Will Apple Shares Fare with Jobs’ Passing?” MSN Money. Oct. 5, 2011. [Link](#)

62. US Department of the Treasury. (2011) “Daily Treasury Statement: Cash and Debt Operations of the United States Treasury.” US Treasury Financial Management Service. Dec. 30, 2011. [Link](#)

63. Paul La Monica. (2012) “With \$97.6 Billion, Apple Has More Cash Than...” CNN Money. Jan. 25, 2012. [Link](#)

64. Neil Mawston. (2011) “Global Tablet OS Market Share: Q3 2011.” Strategy Analytics. Milton Keynes, England.

65. Philip Elmer-DeWitt. (2012) “Canalys: Apple Led the Way as Smartphones Overtook PCs.” Fortune. Feb. 3, 2012. [Link](#)

Also, the third largest mobile phone manufacturer worldwide.

Christina Bonnington. (2012) “Apple Now the World’s Third Largest Cellphone Maker, IDC Says.” Wired. Feb. 2, 2012. [Link](#)



66. Harry Wilson. (2012) “Apple Is World’s Most Valuable Company after iPhone Frenzy Drives Record Profits.” The Telegraph. Jan. 25, 2012. [Link](#)
67. Charles Duhigg, Keith Bradsher. (2012) “How the U.S. Lost Out on iPhone Work.” The New York Times. Jan. 21, 2012. [Link](#)
68. Poornima Gupta. (2012) “Apple Not Turning ‘Blind Eye’ to Supply Chain Problems: CEO.” Reuters. Jan. 27, 2012. [Link](#)
69. Dave Smith. (2012) “Apple Approves Foxconn Investigation: Why Tim Cook Deserves Credit.” International Business Times. Feb. 13, 2012. [Link](#)
- Christina Bonnington. (2012) “Apple’s Foxconn Auditing Group ‘Surrounded with Controversy,’ Critics Say.” Wired. Feb. 13, 2012. [Link](#)
70. David Murphy. (2011) “Apple to Match \$10K in Charitable Contributions per Employee.” PC Magazine. Sep. 10, 2011. [Link](#)
71. Alexis Madrigal. (2012) “The Steve Jobs ‘Reality Distortion Field’ Even Makes It into His FBI File.” The Atlantic. Feb. 9, 2012. [Link](#)
72. George Colony. (2012) “Apple = Sony.” Forrester Research. Apr. 25, 2012. [Link](#)
73. E.S. Browning, Steven Russolillo, Jessica Vascellaro. (2012) “Apple Now Biggest-Ever U.S. Company.” The Wall Street Journal. Aug. 20, 2012. [Link](#)
74. Malcolm Gladwell. (2011) “The Tweaker: The Real Genius of Steve Jobs.” The New Yorker. Nov. 14, 2011. [Link](#)
75. In this poll, 10% of Americans approved of the way Congress was handling its job. (12% of Republicans, 11% of Democrats, 8% of Independents.) 86% disapproved.
- Frank Newport. (2012) “Congress’ Job Approval at New Low.” Gallup. Feb. 8, 2012. [Link](#)
76. The current number of seats was first set in 1911, with one additional seat planned for the new states of Arizona and New Mexico. Congress refused to reapportion in the traditional manner in 1921 following the 1920 Census, then fixed the House of Representatives’ size with the Reapportionment Act of 1929. That the Republican party was the group to do this is somewhat immaterial now, both due to the changes in the party over time and the fact that from then on, no matter who came into power, neither party wanted to dilute its power again and the House remained at its current size. (Except for a brief increase of two additional seats in 1959 for the new states of Alaska and Hawaii.)
- Michel Balinski, H. Peyton Young. (2001) “Fair Representation: Meeting the Ideal of One Man, One Vote.” Brookings Institution Press. Washington, DC.
- Some more recent commentary on this issue:
- George Will. (2001) “Congress Just Isn’t Big Enough.” Jewish World Review. Jan. 15, 2001. [Link](#)

Brian Frederick. (2009) “Congressional Representation & Constituents: The Case for Increasing the U.S. House of Representatives.” Routledge. New York, NY.

Dalton Conley, Jacqueline Stevens. (2011) “Build a Bigger House.” *The New York Times*. Jan. 23, 2011. [Link](#)

77. Ratio of 19:1 based on the first reapportionment, which was based on the first census in 1790, which left 105 seats for a population of 3,929,214, compared to 435 seats for the 2011 population of 311,591,917.

US Census Data. (2012) “State & County QuickFacts.” United States Census Bureau. Washington, DC.

US Census Data. (2010) “1790 Fast Facts.” United States Census Bureau. Washington, DC.

78. One of the original amendments to the Constitution that was never ratified defined a cap, declaring that there should not be more than one representative for every 50,000 citizens.

US House of Representatives. (2012) “Constitutional Amendments Not Ratified.” [Link](#)

79. The Center for Responsive Politics. (2011) “Reelection Rates over the Years.” OpenSecrets.org. [Link](#)

80. This account of 12 members of Congress who became lobbyists found they received salaries that were, on average, about 15 times as much as their Congressional salaries. This is not a scientific study and the accounting methods used are questionable; however, unlike nearly all similar articles, it featured a nearly equal amount of Democrats and Republicans.

Lee Fang. (2012) “Analysis: When a Congressman Becomes a Lobbyist, He Gets a 1,452% Raise (on Average).” *Republic Report*. Mar. 14, 2012. [Link](#)

81. Library of Congress. (2003) “Bill Summary & Status: 108th Congress (2003 - 2004), H.R.1, Cosponsors.” Jun. 25, 2003. [Link](#)

82. Staff Reporter. (2004) “Tauzin Gives Up House Committee Chair.” *CNN*. Feb. 3, 2004. [Link](#)

William Welch. (2004) “Tauzin Switches Sides from Drug Industry Overseer to Lobbyist.” *USA Today*. Dec. 15, 2004. [Link](#)

Reuters. (2004) “Tauzin’s Lobbyist Bid Ends.” *Los Angeles Times*. Feb. 27, 2004. [Link](#)

Although an appointed position, parallels were drawn in 2011 when an FCC Commissioner was hired as a lobbyist for Comcast four months after she voted for a controversial merger between Comcast and NBC Universal.

Edward Wyatt. (2011) “F.C.C. Commissioner Leaving to Join Comcast.” *The New York Times*. May 11, 2011. [Link](#)

83. This article estimates the savings would have been anywhere from \$76 billion to \$220 billion over 10 years, depending on which negotiated rates were used.  
Timothy Noah. (2009) “Obama’s Biggest Health Reform Blunder.” Slate. Aug. 6, 2009. [Link](#)
84. Bruce Bartlett. (2009) “Republican Deficit Hypocrisy.” Forbes. Nov. 20, 2009. [Link](#)
85. Alex Wayne, Drew Armstrong. (2011) “Tauzin’s \$11.6 Million Made Him Highest-Paid Health-Law Lobbyist.” Bloomberg. Nov. 29, 2011. [Link](#)
86. For both the Senate and the House of Representatives, in over 90% of races, the candidate who spent the most money won.  
The Center for Responsive Politics. (2008) “Money Wins Presidency and 9 of 10 Congressional Races in Priciest U.S. Election Ever.” Press Release. Nov. 5, 2008. [Link](#)
87. The Center for Responsive Politics. (2012) “The Price of Admission.” OpenSecrets.org. [Link](#)  
Dave Gilson. (2010) “The Price of Admission to the House and Senate.” Mother Jones. Sep./Oct. 2010. [Link](#)
88. Pew Research Center. (2010) “Independents Oppose Party in Power ... Again.” Pew Research Center. Washington, DC.
89. One of the more recent examples: Jon Huntsman was reportedly uninvited from a Republican fundraiser for his comments the previous week about how third-party candidates could be beneficial.  
Zeke Miller. (2012) “Jon Huntsman Dropped from RNC Event for ‘Third Party’ Call.” BuzzFeed. Mar. 2, 2012. [Link](#)
90. This is, of course, a perennial complaint, but the situation is actually much worse now than at other times in the past. For an analytical look at just how polarized Congress has become, see:  
John Aloysius Farrell. (2012) “Divided We Stand.” National Journal. Feb. 23, 2012. [Link](#)
91. William Booth. (2004) “Reality Is Only an Illusion, Writers Say: Hollywood Scribes Want a Cut of Not-So-Unscripted Series.” The Washington Post. Aug. 10, 2004. p. C01. [Link](#)
92. We tend to seek out information that agrees with our beliefs and avoid that which disagrees, particularly when we hold those beliefs with conviction.  
William Hart, Dolores Albarracín, Alice Eagly, Inge Brechan, Matthew Lindberg, Lisa Merrill. (2009) “Feeling Validated Versus Being Correct: A Meta-Analysis of Selective Exposure to Information.” Psychological Bulletin. Vol. 135, No. 4, pp. 555-588.

93. Pew Research Center. (2011) “Press Widely Criticized, but Trusted More Than Other Information Sources.” Pew Research Center. Washington, DC. [Link](#)  
 Pew Research Center. (2012) “Further Decline in Credibility Ratings for Most News Organizations.” Pew Research Center. Washington, DC. [Link](#)
94. Time. (2009) “Now That Walter Cronkite Has Passed On, Who Is America’s Most Trusted Newscaster?” Poll Results. Jul. 22, 2009. [Link](#)  
 Note: This poll did not use random sampling, and therefore cannot be generalized to the population.  
 Another poll named Stewart the most influential man in America.  
 Elaine Lies. (2010) “TV Host Jon Stewart Named Most Influential Man of 2010.” Reuters. Oct. 26, 2010. [Link](#)
95. Terry Gross. (2010) “Jon Stewart: The Most Trusted Name in Fake News.” NPR. Oct. 4, 2010. [Link](#)
96. Comedy Central. (2011) “Comedy Central Wins Five Primetime Emmy Awards for ‘The Daily Show with Jon Stewart,’ ‘Futurama’ and ‘Thedailyshow.Com.’” Press Release. Sep. 19, 2011. [Link](#)
97. On his show, Stewart shrugged off the results by saying: “It was an Internet poll ... and I was the ‘none of the above’ answer.”  
 Jon Stewart. (2009) Interview with Dara Torres. The Daily Show. Comedy Central. Aug. 9, 2009. [Link](#)
98. Robert Hendin. (2010) “Poll Reveals Most Americans Don’t Know They Got a Tax Cut.” CBS News. Feb. 12, 2010. [Link](#)
99. Judson Berger. (2009) “Modern-Day Tea Parties Give Taxpayers Chance to Scream for Better Representation.” Fox News. Apr. 9, 2009. [Link](#)
100. Susan Roesgen. (2009) Report from Chicago Tea Party protest. CNN. Broadcast Apr. 15, 2009, 2:09-2:10 pm ET.  
 This segment was particularly dismissive, but was representative of the way most non-conservative news outlets covered the Tea Party protests at first.
101. USA Today/Gallup. (2010) “Tea Partiers Are Fairly Mainstream in Their Demographics.” Gallup. Apr. 5, 2010. [Link](#)
102. Kate Zernike. (2010) “Unlikely Activist Who Got to the Tea Party Early.” The New York Times. Feb. 27, 2010. [Link](#)
103. Staff Reporter. (2010) “An Up-Close Look at the Tea Party and Its Role in the Midterm Elections.” The Washington Post. Oct. 24, 2010. [Link](#)
104. 96% disapproved of the way Congress was handling its job, and 94% thought that most members of Congress should be replaced. This was even before the debt ceiling debate brought approval ratings to all-time lows.  
 New York Times/CBS News. “National Survey of Tea Party Supporters.” The New York Times. Apr. 12, 2010. [Link](#)

105. NBC/Wall Street Journal. (2009) “Study #6099.” MSNBC. Dec. 15, 2009.  
This survey was widely criticized, both because three-quarters of respondents who said they supported the Tea Party also said they got their news from Fox News, as well as because in the same survey, only 7 percent of respondents said they knew a great deal about the Tea Party. However, the fact remains that many people felt positively about the movement, even if they didn’t know a lot about it. For details of the fallout of this survey, see: PolitiFact. (2010) “Arney Says Tea Party Is More Popular Than Democrats, Republicans.” PolitiFact.com. Jan. 25, 2010. [Link](#)
106. Numbers are approximate, as lists of Tea Party candidates varied between sources.  
Staff Reporter. (2010) “Tea Party Candidates of the 2010 Midterm Election.” Fox News. Oct. 31, 2010. [Link](#)  
Alexandra Moe. (2010) “Just 32% of Tea Party Candidates Win.” MSNBC. Nov. 3, 2010. [Link](#)  
Of those listed as “Undecided” when the previous article was published, Joe Walsh (IL-8), Ann Marie Buerkle (NY-25), and Blake Farenthold (TX-27) also won.  
See also:  
Wikipedia. (2011) “List of Tea Party Politicians.” Nov. 4, 2010. [Link](#)  
Jeff Zeleny. (2010) “G.O.P. Captures House, but Not Senate.” New York Times. Nov. 2, 2010. [Link](#)
107. Jeffrey Jones. (2010) “Americans See Positive, Negative Effects of Tea Party Movement.” Gallup. Nov. 4, 2010. [Link](#)
108. Lydia Saad. (2011) “Americans Believe GOP Should Consider Tea Party Ideas.” Gallup. Jan. 31, 2011. [Link](#)
109. Andrea Stone. (2010) “Tea Party Freshmen in Congress Face Reality Check.” AOL News. Nov. 20, 2010. [Link](#)
110. Tom Brown. (2011) “Tea Party Shows Its Clout in Debt Debate.” Reuters. Jul. 29, 2011. [Link](#)
111. PolitiFact. (2011) “Arianna Huffington Says U.S. Debt Ceiling Rules Are Unusual Internationally.” PolitiFact.com. Jul. 25, 2011. [Link](#)  
Caveat: Denmark has a debt ceiling, but it is kept so high that it makes little difference.  
Fareed Zakaria. (2011) “Fareed Zakaria GPS.” CNN. Broadcast Jul. 31, 2011. [Link](#)
112. Office of Management and Budget. (2011) “Table 7.3—Statutory Limits on Federal Debt: 1940–Current.” OMB. Washington, DC.
113. Neil Cavuto. (2011) “Blaming the Tea Party for America’s Debt Dilemma? Better Get Your Facts Straight.” Fox News. Jul. 22, 2011. [Link](#)

114. “Since the late 1950s, the federal government increased its borrowing from the public in all years, except in FY1969 following imposition of a war surcharge and in the period FY1997-FY2001.” (Note: The fiscal year for the federal budget corresponds to the year in which it ends, and begins in October of the previous year.)  
D. Andrew Austin, Mindy Levit. (2011) “The Debt Limit: History and Recent Increases.” Congressional Research Service. Washington, DC.
115. Brian Montopoli. (2011) “Poll: Most Americans Oppose Raising Debt Limit.” CBS News. Apr. 21, 2011. [Link](#)
116. Pedro Nicolaci da Costa. (2011) “Analysis: In Debt Row, Hints of Emerging-Economy Crises.” Reuters. Jul. 24, 2011. [Link](#)  
Neel Kashkari. (2011) “Could a U.S. Debt Downgrade Trigger a Financial Crisis?” The Washington Post. Jul. 28, 2011. [Link](#)
117. Pew Research Center. (2011) “Public Sees Budget Negotiations as ‘Ridiculous’, ‘Disgusting’, ‘Stupid’.” Pew Research Center. Washington, DC.
118. Frank Newport. (2011) “Americans, Including Republicans, Want Debt Compromise.” Gallup. Jul. 18, 2011. [Link](#)
119. Frank Newport. (2011) “Tea Party Supporters Oppose Debt Agreement, 68% to 22%.” Gallup. Aug. 4, 2011. [Link](#)
120. John Cookon. (2011) “World Reacts to U.S. Debt Crisis.” CNN. Jul. 29, 2011. [Link](#)
121. Damian Paletta, Matt Phillips. (2011) “S&P Strips U.S. of Top Credit Rating.” The Wall Street Journal. Aug. 6, 2011. [Link](#)
122. Michael Cooper, Megan Thee-Brenan. (2011) “Disapproval Rate for Congress at Record 82% after Debt Talks.” New York Times. Aug. 4, 2011. [Link](#)
123. Ewen MacAskill. (2011) “US Debt Crisis: Tea Party Intransigence Takes America to the Brink.” The Observer. Jul. 30, 2011. [Link](#)  
Robert Schlesinger. (2011) “Debt Ceiling Stalemate Illustrates the Tea Party’s Reality Gap.” U.S. News & World Report. Jul. 27, 2011. [Link](#)  
Lucy Madison. (2011) “Axelrod: This is a ‘Tea Party downgrade.’” CBS News. Aug. 7, 2011. [Link](#)  
Elspeth Reeve. (2011) “The Tea Party’s Brand Is Crisis.” The Atlantic. Aug. 8, 2011. [Link](#)
124. Michael Cooper, Megan Thee-Brenan. (2011) “Disapproval Rate for Congress at Record 82% after Debt Talks.” New York Times. Aug. 4, 2011. [Link](#)  
CBS News. (2011) “The Debate over the Debt Ceiling.” Poll Results. Jul. 18, 2011. [Link](#)
125. Lydia Saad. (2011) “Tea Party Sparks More Antipathy Than Passion.” Gallup. Aug. 10, 2011. [Link](#)

126. Evidence of diminished support can be seen by the fact that no prime time speakers even mentioned the phrase “Tea Party” at the 2012 Republican National Convention.
- Tony Lee. (2012) “Tea Party to GOP: We Built Your Majority.” Breitbart. Aug. 29, 2012. [Link](#)
- Rosie Gray. (2012) “Major Republican Speakers Avoid Two Words: ‘Tea Party.’” BuzzFeed. Aug. 30, 2012. [Link](#)
127. 87% of respondents said that “dissatisfaction with mainstream Republican leaders” was an important factor in the support the Tea Party had received.
- Staff Reporter. (2010) “An Up-Close Look at the Tea Party and Its Role in the Midterm Elections.” The Washington Post. Oct. 24, 2010. [Link](#)
- 88% said they disapproved of the way Barack Obama was handling his job as president.
- New York Times/CBS News. (2010) “National Survey of Tea Party Supporters.” New York Times. Apr. 12, 2010. [Link](#)
128. Nick Carey. (2011) “Stuck Between the Tea Party and a Hard Place.” Reuters. May 17, 2011. [Link](#)
129. John Whitesides. (2011) “First Republican Presidential Debate Postponed.” Reuters. Mar 30, 2011. [Link](#)
130. Staff Reporter. (2011) “Key Contenders Missing from GOP Debate.” United Press International. May 5, 2011. [Link](#)
131. Staff Reporter. (2011) “Pawlenty Drops 2012 Presidential Bid.” Fox News. Aug. 14, 2011. [Link](#)
132. Staff Reporter. (2010) “An Up-Close Look at the Tea Party and Its Role in the Midterm Elections.” The Washington Post. Oct. 24, 2010. [Link](#)
133. 18% of respondents chose “Undecided/Don’t know,” making the choice more popular than any named candidate.
- CBS News. (2011) “The Republican Nomination Race: Romney, Cain Move to the Top.” Press Release. Oct. 4, 2011.
134. A good view of the wild swings between polls results for 2012 Republican presidential candidates can be seen at:
- RealClearPolitics. (2012) “2012 Republican Presidential Nomination.” RealClearPolitics.com. Feb 14, 2012. [Link](#)
135. NBC News/Wall Street Journal Survey. (2012) “Study #12202.” MSNBC. Mar. 5, 2012.
- Overview of results, including “when asked to describe the GOP nominating battle in a word or phrase, nearly 70 percent of respondents – including six in 10 independents and even more than half of Republicans – answered with a negative comment.”

Mark Murray. (2012) “NBC/WSJ Poll: Primary Season Takes ‘Corrosive’ Toll on GOP and Its Candidates.” MSNBC. Mar. 5, 2012. [Link](#)

136. Michelle Malkin. (2011) Twitter. Oct. 25, 2011. [Link](#)

Similar sentiments were widespread, including this story that referenced the tweet:

John Avlon. (2011) “Birthers, Smokers, Jokers – It’s Silly Season in GOP Politics.” CNN. Oct. 26, 2011. [Link](#)

137. In March 2012, Romney’s favorability hit a low of 29% overall; among Republicans it was still only 60%. In September 2012, his overall favorability was 45%, the first candidate to hold a generally unfavorable rating that close to the election since Pew began tracking such data in 1988.

Pew Research Center. (2011) “Obama Ahead with Stronger Support, Better Image and Lead on Most Issues.” Pew Research Center. Washington, DC. [Link](#)

138. For example, in a 2012 Republican primary exit poll, twice as many voters said the most important candidate quality was “Can Defeat Obama,” compared to “Right Experience.” Furthermore, Romney was overwhelmingly favored as being the most able to defeat Obama, but less than half strongly supported him. Most people who voted for him said they had reservations about him.

CNN. (2012) “Exit Polls: Illinois Republicans.” Mar. 16, 2012. [Link](#)

See also:

Patricia Zengerle. (2011) “Romney Has Clear Lead Among Republicans: Poll.” Reuters. Nov. 13, 2011. [Link](#)

Editorial Staff. (2011) “Bachmann-Perry Overdrive: GOP Voters Are Still Searching for a Unifying Candidate.” The Wall Street Journal. Aug. 15, 2011. [Link](#)

139. Ian Schwartz. (2012) “Rush Limbaugh: Media Running Campaign to Dispirit You.” RealClearPolitics. Sep. 10, 2012. [Link](#)

Note: This particular quote comes after the point of divergence in the story, but he had made similar statements in the past.

140. David Rothschild, Chris Wilson. (2012) “Obama Poised to Win 2012 Election with 303 Electoral Votes.” Yahoo! News. Feb. 16, 2012. [Link](#)
141. Author’s Note: “Progressive” here refers to the successive rounds of meetings, rather than the political connotation of the word. Alternatively, it could have been called “recursive selection,” but progressive is a more common term.
142. 51% of responding organizations determined their activity and strategy “entirely” at the local level; 36% “mainly” at the local level.

Staff Reporter. (2010) “An Up-Close Look at the Tea Party and Its Role in the Midterm Elections.” The Washington Post. Oct. 24, 2010. [Link](#)



143. To be clear, the Tea Party Patriots is a real organization, and Mark Meckler and Jenny Beth Martin are real; however, unless otherwise noted, all of their actions and quotes in this story are fictional.
144. Nicholas Carlson. (2010) “At Last -- The Full Story of How Facebook Was Founded.” Business Insider. Mar. 5, 2010. [Link](#)
145. The best phones at the time could run most applications designed for the iPad 2, just not as well.  
Anand Lal Shimpi, Brian Klug. (2011) “iPhone 4S Preliminary Benchmarks: ~800MHz A5, Slightly Slower GPU than iPad 2, Still Very Fast.” AnandTech. Oct. 11, 2011. [Link](#)
146. Eight out of ten early Tea Party supporters identified as Republicans.  
Frank Newport. (2010) “Tea Party Supporters Overlap Republican Base.” Gallup. Jul. 2, 2010. [Link](#)
147. Specifically, the author says that for a crowd to make a wise decision, it needs to be a decentralized group of independent people with diverse opinions, and that there needs to be a good mechanism in place to aggregate individual decisions.  
James Surowiecki. (2004) “The Wisdom of Crowds.” Anchor Books. New York, NY.
148. Notably, Mike Huckabee, but others who polled well at various times but declined to run also included Sarah Palin, Donald Trump, Chris Christie, Mitch Daniels, Haley Barbour, and Rudy Giuliani.  
Michael Memoli, Katherine Skiba. (2011) “Huckabee Announces He Will Not Run for President.” Los Angeles Times. May 15, 2011. [Link](#)
149. Staff Reporter. (2011) “Romney, Cain Under Fire at Feisty GOP Debate.” Fox News. Oct. 19, 2011. [Link](#)
150. John McCain raised \$368M and spent \$333M. Barack Obama raised \$745M and spent \$730M. Based on Federal Election Commission data released on Oct. 27, 2008.  
The Center for Responsive Politics. (2008) “Banking on Becoming President.” OpenSecrets.org. [Link](#)  
Note: The trend of roughly doubling continued in 2012, with total spending being estimated at around \$2 billion – without even including the hundreds of millions spent by some outside tax-exempt groups.  
S.V. Date. (2012) “Both Obama, Romney on Track to Spend \$1 Billion by Election Day.” NPR. Oct. 21, 2012. [Link](#)  
Associated Press. (2012) “Presidential Election to Pass \$2B Fundraising Mark.” CBS News. Oct. 25, 2012. [Link](#)  
Staff Reporter. (2012) “The 2012 Money Race: Compare the Candidates.” The New York Times. Nov. 6, 2012. [Link](#)

151. The Center for Responsive Politics. (2008) “Presidential Fundraising and Spending, 1976-2008.” OpenSecrets.org. [Link](#)
152. Adbusters. (2011) “#OCCUPYWALLSTREET: A Shift In Revolutionary Tactics.” Adbusters. Jul. 13, 2011. [Link](#)
153. Staff Reporter. (2011) “Protesters in N.Y.C. Blast Money in Politics.” CBS News. Sep. 17, 2011. [Link](#)
154. Karla Adam. (2011) “Occupy Wall Street Protests Go Global.” The Washington Post. Oct. 15, 2011. [Link](#)
155. James Davies, Susanna Sandström, Anthony Shorrocks, Edward Wolff. (2008) “The World Distribution of Household Wealth.” Working Paper No. 2008/03. World Institute for Development Economics Research. Helsinki, Finland.
156. Andrew Sum, Joseph McLaughlin. (2010) “How the U.S. Economic Output Recession of 2007-2009 Led to the Great Recession in Labor Markets.” Center for Labor Market Studies. Northeastern University. Boston, MA.
157. “This year, the share of young people who were employed in July was 48.8 percent, the lowest July rate on record for the series, which began in 1948.” Bureau of Labor Statistics. (2011) “Employment and Unemployment Among Youth Summary.” US Department of Labor. Washington, DC. Aug. 21, 2011. [Link](#)
158. Scott Cohn. (2011) “Occupy Wall Street Protesters Demand Student Loan Relief.” CNBC. Oct. 12, 2011. [Link](#)
159. In inflation-adjusted dollars, tuition at public, four-year institutions was 3.68 times higher in 2011 than in 1981.  
Sandy Baum, Jennifer Ma. (2011) “Trends in College Pricing.” The College Board. New York, NY.
160. Andrew Sum, Ishwar Khatiwada, Allison Beard, Sheila Palma. (2010) “Labor Underutilization Problems of U.S. Workers Across Household Income Groups at the End of the Great Recession.” Center for Labor Market Studies. Northeastern University. Boston, MA.  
Great overview of the situation:  
William Symonds, Robert Schwartz, Ronald Ferguson. (2011) “Pathways to Prosperity: Meeting the Challenge of Preparing Young Americans for the 21st Century.” Harvard Graduate School of Education. Cambridge, MA.
161. Oct. 2011 unemployment rate for veterans under 25: 30.4%. Veterans 25 and over: 7.2%. All people 25 and over: 7.3%. All people 18 and over: 8.3%.  
Bureau of Labor Statistics. (2011) “Labor Force Statistics from the Current Population Survey: Employment Status of Persons by Veteran Status, Age, Race, Hispanic or Latino Ethnicity, and Sex, October 2011, Not Seasonally Adjusted.” US Department of Labor. Washington, DC.

- 162. Stephen Gandel. (2010) “In a Tough Job Market, Teens Are Suffering Most.” Time. Jan. 18, 2010. [Link](#)
- 163. CNN Wire Staff. (2011) “Occupy Movement Fights Foreclosures, Protests Program Cuts.” CNN. Nov. 8, 2011. [Link](#)
- 164. David Kocieniewski. (2011) “Biggest Public Firms Paid Little U.S. Tax, Study Says.” New York Times. Nov. 3, 2011. [Link](#)  
David Cay Johnston. (2011) “Benefiting from Taxes.” Reuters. Nov. 8, 2011. [Link](#)

See also:

Robert McIntyre, Matthew Gardner, Rebecca Wilkins, Richard Phillips. (2011) “Corporate Taxpayers & Corporate Tax Dodgers, 2008-10.” Institute on Taxation and Economic Policy, Citizens for Tax Justice. Washington, DC.

- 165. While there are thousands of articles exploring this point from many perspectives, this is one of the clearest analyses:  
PolitiFact. (2011) “Warren Buffett Says the Super-Rich Pay Lower Tax Rates Than Others.” PolitiFact. Aug. 18, 2011. [Link](#)
- 166. Adriana Reyneri. (2011) “Economic Situation Warrants Tax Hikes, Program Cuts, Say Millionaires.” The Spectrem Group. Oct. 24, 2011. [Link](#)

Reported in:

Robert Frank. (2011) “Millionaires Support Warren Buffett’s Tax on the Rich.” The Wall Street Journal. Oct. 27, 2011. [Link](#)

Brad Tuttle. (2011) “Maybe Millionaires Aren’t So Bad? Most Support Higher Taxes on the Rich.” Time. Oct. 28, 2011. [Link](#)

See also:

Adam Clark Estes. (2011) “Look at All the Rich People Supporting Occupy Wall Street.” The Atlantic. Oct. 13, 2011. [Link](#)

- 167. Margaret Coker, Charles Levinson, Jonathan Weisman. (2011) “Mubarak Promises to Step Down.” The Wall Street Journal. Feb. 2, 2011. [Link](#)
- 168. Adbusters. (2011) “#OCCUPYWALLSTREET: A Shift In Revolutionary Tactics.” Adbusters. Jul. 13, 2011. [Link](#)
- 169. In the beginning, one of the most common media assessments of the OWS movement was that it had no coherent message.  
N. R. Kleinfield, Cara Buckley. (2011) “Wall Street Occupiers, Protesting Till Whenever.” The New York Times. Sep. 30, 2011. [Link](#)  
Edward Hadas. (2011) “Breakingviews: Occupy Wall Street Still Lacks Lucid Message.” Reuters. Oct. 28, 2011. [Link](#)  
Jennifer Booton. (2011) “Occupy Wall Street’s Message? Try Checking Facebook.” Fox Business. Nov. 11, 2011. [Link](#)

170. This editorial is representative of the argument against the common criticism of the movement having no clear message.  
 Dahlia Lithwick. (2011) “Occupy the No-Spin Zone.” Slate. Oct. 26, 2011. [Link](#)
171. Ashley Powers. (2011) “Occupy Denver’s Search for a Leader Goes to the Dogs.” Los Angeles Times. Nov. 9, 2011. [Link](#)
172. Jeffrey Jones. (2011) “Most Americans Uncertain about ‘Occupy Wall Street’ Goals.” Gallup. Oct. 18, 2011. [Link](#)
173. Dunstan Prial. (2011) “Occupy Wall Street, Tea Party Movements Both Born of Bank Bailouts.” Fox Business. [Link](#)
174. Jeffrey Jones. (2011) “Most Americans Uncertain about ‘Occupy Wall Street’ Goals.” Gallup. Oct. 18, 2011. [Link](#)
175. Sam Roberts. (2009) “2008 Surge in Black Voters Nearly Erased Racial Gap.” The New York Times. Jul. 20, 2009. [Link](#)
176. Kim Zetter. (2009) “Nation’s First Open Source Election Software Released.” Wired. Oct. 23, 2009. [Link](#)

Dana Blankenhorn. (2007) “Open Source Values: Transparency.” ZDNet Blogs. Nov. 6, 2007. [Link](#)

Also:

“Talk is cheap. Show me the code.”

Linus Torvalds. (2000) Linux Kernel Mailing List. Aug. 25, 2000. [Link](#)

177. Shaull Oreg, Oded Nov. (2008) “Exploring Motivations for Contributing to Open Source Initiatives: The Roles of Contribution Context and Personal Values.” Computers in Human Behavior. Vol. 24, No. 5, pp. 2055-2073.
178. About 70,000 hours of video per day were uploaded to YouTube in May 2011.  
 YouTube. (2011) “Thanks, YouTube Community, for Two BIG Gifts on Our Sixth Birthday!” Broadcasting Ourselves ;), The Official YouTube Blog. May 25, 2011. [Link](#)
179. This figure is a rough estimate for illustrative purposes only. Estimate based on 2011 costs on Amazon’s EC2 platform and does not consider a wide variety of economic factors, such as inflation or continually falling data service costs. Furthermore, it does not include software development or cloud computing costs, as the largest cost would be storing and serving the video records of the meetings.

Calculations based on the following estimates:

624x352 video, 30fps, H.264 codec, 48kHz mono audio = 1100-1300 kbps = ~1 GB per 2-hour video file.

42 million participants in 2016, 10% of winners choose not to participate in the next round, two hour meetings = ~7.5 million hours of video = ~7.5 petabytes at full participation.

Prices for data services based on one year at \$0.10 per GB-mo. of storage, \$0.05 per GB of data transfer (lowest published rates). Ten full views for each video each year = \$2.50 per video, per year. (Note: Viewing rate is a completely arbitrary guess and would dramatically affect the final cost.)

Amazon Web Services. (2011) "Amazon EC2 Pricing." Amazon. [Link](#)

180. Total cost based on price of materials from:

Andrew Rassweiler. (2011) "iPad 2 Carries Bill of Materials of \$326.60, IHS iSuppli Teardown Analysis Shows." IHS iSuppli. El Segundo, CA. Press Release. Mar 13, 2011. [Link](#)

181. Similar to the experience promised by Silk on the Kindle Fire which many feel, unfortunately, fell short.

Jared Newman. (2011) "Amazon Announces \$199 Kindle Fire Tablet, Clutch of New Kindle E-Readers." PC World. Sep. 28, 2011. [Link](#)

The Amazon Silk Team. (2011) "Introducing Amazon Silk." Amazon Silk Blog. Sep. 28, 2011. [Link](#)

Eric Franklin. (2011) "Kindle Fire vs. iPad 2 vs. Tab 8.9: Performance Speeds." CNET. Nov. 15, 2011. [Link](#)

182. This calculation assumes 10% of winners of each round choose not to progress to the next round. At most, just under five out of 100,000 would progress past the fourth round.

183. Staff Reporter. (2010) "An Up-Close Look at the Tea Party and Its Role in the Midterm Elections." The Washington Post. Oct. 24, 2010. [Link](#)

Additional info: Median amount raised in 2010: \$800. Median amount of cash on hand: \$500. 95% of funding came from individuals. 95% of funding came from local sources.

184. Public Policy Institute of California. (2010) "California's Likely Voters." PPIC. San Francisco, CA. Aug. 1, 2010. [Link](#)

California has voted for Democrats in presidential elections since 1992.

David Leip. (2011) "Presidential General Election Results (1992-2008)." Atlas of U.S. Presidential Elections. USElectionAtlas.org. [Link](#)

185. Texas has voted for Republicans in presidential elections since 1980.

David Leip. (2011) "Presidential General Election Results (1980-2008)." Atlas of U.S. Presidential Elections. USElectionAtlas.org. [Link](#)

186. At the time of writing, the English version of Wikipedia did not have ratings, although a similar system had been described that rated articles on trustworthiness, objectivity, completeness, and quality of writing.

Marshall Kirkpatrick. (2011) "'Rate This Page' Is Coming to the English Wikipedia." Read Write Web. Jul. 18, 2011. [Link](#)

187. Jeffrey Jones. (2010) "Debt, Gov't. Power Among Tea Party Supporters' Top Concerns." Gallup. Jul. 5, 2010. [Link](#)

188. Karla Adam. (2011) “Occupy Wall Street Protests Go Global.” The Washington Post. Oct. 15, 2011. [Link](#)
189. Real person, fictional quote.
190. Lucy Tobin. (2011) “Axe Falls on Forensics Students.” The Guardian. Mar. 14, 2011. [Link](#)
191. Wikipedia. (2011) “Grinder (Ice Hockey).” Jun. 28, 2011. [Link](#)
192. Shanto Iyengar, Kyu Hahn. (2009) “Red Media, Blue Media: Evidence of Ideological Selectivity in Media Use.” *Journal of Communication*. Vol. 59, No. 1, pp. 19-39.
- Shanto Iyengar , Kyu Hahn , Markus Prior. (2001) “Has Technology Made Attention to Political Campaigns More Selective? An Experimental Study of the 2000 Presidential Campaign.” Paper presented at a conference of the American Political Science Association, Aug. 2001. San Francisco, CA.
193. Subjects in this study were people who thought of themselves as “committed Republicans or Democrats.”
- Author’s Note: To clarify, portions of the brain do not physically “shut off,” but rather they are not activated in lieu of other portions. This phrasing should make sense to a general audience but will probably bother neuroscientists.
- Drew Westen, Pavel Blagov, Keith Harenski, Clint Kilts, Stephan Hamann. (2006) “Neural Bases of Motivated Reasoning: An fMRI Study of Emotional Constraints on Partisan Political Judgment in the 2004 U.S. Presidential Election.” *Journal of Cognitive Neuroscience*. Vol. 18, No. 11, pp. 1947-1958.
194. Charles Taber, Milton Lodge. (2006) “Motivated Skepticism in the Evaluation of Political Beliefs.” *American Journal of Political Science*. Vol. 50, No. 3, pp. 755-769.
195. Brendan Nyhan, Jason Reifler. (2010) “When Corrections Fail: The Persistence of Political Misperceptions.” *Political Behavior*. Vol. 32, No. 2, pp. 303-330.
196. Geoffrey Munro. (2010) “The Scientific Impotence Excuse: Discounting Belief-Threatening Scientific Abstracts.” *Journal of Applied Social Psychology*. Vol. 40, No. 3, pp. 579-600.
197. Yechiel Klar, Eilath Giladi. (1997) “No One in My Group Can Be Below the Group’s Average: A Robust Positivity Bias in Favor of Anonymous Peers.” *Journal of Personality and Social Psychology*. Vol. 73, No. 5, pp. 885-901.
198. Although the previous paragraph contains a fictional quote from a fictional book, this phenomenon is explored in:
- Farhad Manjoo. (2008) “True Enough: Learning to Live in a Post-Fact Society.” John Wiley & Sons. Hoboken, NJ.
199. “Stoned slackers” is what Bill O’Reilly has called Jon Stewart’s audience on more than one occasion, notably first in 2004 and again in 2011.

200. Bill O'Reilly. (2011) The O'Reilly Factor. Broadcast Apr. 6, 2011.
201. To which Stewart added, "...which is like being the thinnest kid at fat camp."  
Jon Stewart. (2011) The O'Reilly Factor. Broadcast Feb. 3, 2011.
202. Mark Blumenthal. "The Case for Robo-Pollsters." National Journal. Sep. 14, 2009. (Updated Jan. 2, 2011.) [Link](#)
203. H.R. 3035, "The Mobile Informational Call Act of 2011," proposed Sep. 22, 2011, would make automated calls to mobile phones legal.  
US Chamber of Commerce. (2011) "Coalition Letter in Support of H.R. 3035, the 'Mobile Informational Call Act of 2011.'" Sep. 23, 2011. [Link](#)
204. Frank Newport, Lydia Saad, David Moore. (1997) "How are Polls Conducted?" (Michael Golay, Ed.) In "Where America Stands." John Wiley & Sons. Hoboken, NJ.
205. Stephen Blumberg, Julian Luke. (2010) "Wireless Substitution: Early Release of Estimates from the National Health Interview Survey, July-December 2009." Centers for Disease Control and Prevention. Atlanta, GA.
206. For a good overview of the problems mobile phones cause in polling, see:  
Scott Keeter, Michael Dimock, Leah Christian, Courtney Kennedy. (2008) "The Impact of 'Cell-Onlys' on Public Opinion Polls: Ways of Coping with a Growing Population Segment." Pew Research Center. Washington, DC. [Link](#)  
Also:  
Staff Reporter. (2008) "Cell Phones and Political Polls." FactCheck.org. Feb. 21, 2008. [Link](#)
207. Author's Note: In this article, Leve makes these points far better than I did. I would have included several paragraphs of direct quotes if doing so wouldn't have violated the tenets of fair use.  
Mark Blumenthal. (2009) "Is Polling As We Know It Doomed?" National Journal. Aug. 10, 2009. [Link](#)  
Note: There is some controversy over robo-polls and political polls in general. They can usually predict elections well, but anything more nuanced is less reliable. Many have participation levels of less than 10%, which makes critics question what is similar about those who answer. Specifically, these polls are indeed accurate in that they conform to a low margin of error – in that if the process were repeated it would get 95% of the same results 95% of the time. However, repeating a flawed process consistently merely gets consistently flawed data.
208. Staff Reporter. (2011) "American News Media Cover Royal Wedding More Frequently than UK Counterparts." The Nielsen Company. Apr. 25, 2011. [Link](#)
209. Ravi Somaiya. (2011) "In Media's Wedding Frenzy, Hints of Viewer Fatigue." The New York Times. Apr. 22, 2011. [Link](#)

210. Nate Silver. (2011) “Media’s Spotlight Shines Less Brightly on Palin.” The New York Times. Apr. 21, 2011. [Link](#)
- Nate Silver. (2010) “The 800-Pound Mama Grizzly Problem.” The New York Times. Nov. 19, 2010. [Link](#)
211. Adam Caparell. (2011) “Donald Trump Presidential Run a Stunt? NBC Exec Believes the Reality Star Is Bluffing for Ratings.” New York Daily News. Apr. 19, 2011. [Link](#)
- Jeremy Peters, Brian Stelter. (2011) “Trump for President in 2012? Maybe. Trump for Trump? Without Question.” The New York Times. Apr. 2, 2011. [Link](#)
212. Sara Forden. (2011) “Trump Says He’s Decided ‘In My Mind’ to Seek Presidency after ‘Apprentice.’” Bloomberg. May 2, 2011. [Link](#)
- Kathleen Foster. (2011) “Trump: Stay Tuned for Announcement?” Fox News. May 16, 2011. [Link](#)
- Staff Reporter. (2011) “Trump Declines to Run for President, Cites ‘Passion’ for Business.” Fox News. May 16, 2011. [Link](#)
- Lindsey Boerma. (2011) “Trump Stumped: No Big Announcement on Celebrity Apprentice Finale.” National Journal. May 10, 2011. [Link](#)
213. Colby Hall. “Trump Saturation Coverage Simply Reflects Classic Media Bias.” Mediaite. Apr. 28, 2011. [Link](#)
214. Staff Reporter. (2008) “Born in the U.S.A.” FactCheck.org. Apr. 27, 2011. [Link](#)
215. Bill O’Reilly. (2011) The O’Reilly Factor. Broadcast Apr. 13, 2011.
216. Lymari Morales. (2011) “Obama’s Birth Certificate Convinces Some, but Not All, Skeptics.” Gallup. May 13, 2011. [Link](#)
217. Bill Foster (Director). (1986) “The Mystery of Al Capone’s Vaults.” Documentary.
- David Bock. (1994) “Geraldo Rivera’s Failure Launches His Career.” Entertainment Weekly. No. 219. Apr. 22, 1994. [Link](#)
218. Derek Willis. (2011) “Help Us Review the Sarah Palin E-Mail Records.” The New York Times. Jun. 9, 2011. [Link](#)
- Staff Reporter. (2011) “The Sarah Palin Emails.” The Guardian. Jun. 10, 2011. [Link](#)
- Chris Matyszczyk. (2011) “Media Crowdsources, Live Blogs, Crosses Fingers Over Palin’s E-Mails.” CNET. Jun. 11, 2011. [Link](#)
219. Project for Excellence in Journalism. (2007) “The Invisible Primary—Invisible No Longer.” Pew Research Center. Washington, DC. [Link](#)
- Katharine Seelye. (2007) “Horse Race Prevails in Campaign Reporting.” The New York Times. Oct. 29, 2007. [Link](#)



220. The full titles of all shows listed have the host's name in them, i.e., *Anderson Cooper 360*; *Hardball with Chris Matthews*; *The Situation Room with Wolf Blitzer*.
221. Tricia Sartor. (2011) "Iraq Coverage Reaches a New Low in 2011." Pew Research Center. Washington, DC. [Link](#)
222. Astronomers only use light years to talk to non-astronomers. Amongst themselves, scientists use parsecs, not light years.
223. Christine Romans. (2009) "How Big is a Trillion Dollars?" CNN. Segment broadcast Feb. 4, 2009, 1:07 pm ET.
224. All calculations were performed using the latest statistics released by the IRS at the time of writing. In 2008, returns were filed for an estimated 196,188,690 people. (142,450,569 total, 53,738,121 were joint returns.) Of those, 103,980,006 (approx.. 53%) actually paid federal income taxes.
- Internal Revenue Service. (2011) "All Returns: Adjusted Gross Income, Exemptions, Deductions, and Tax Items – 2008." IRS. Washington, DC. [Link](#)
- The fictional numbers are loosely based on the initial CBO estimate of the 2008 bank bailout at \$700 billion and the 2009 stimulus at \$789 billion. The tax break was based on the Close Big Oil Tax Loopholes Act, which failed on May 17, 2011.
225. Carl Hulse. (2011) "Budget Deal to Cut \$38 Billion Averts Shutdown." The New York Times. Apr. 8, 2011. [Link](#)
226. David Fahrenthold. (2011) "Budget Deal: CBO Analysis Shows Initial Spending Cuts Less Than Expected." The Washington Post. Apr. 12, 2011. [Link](#)
- Bob Schieffer. (2011) "The Truth Behind the \$38 Billion Budget Cuts." CBS News. Apr. 17, 2011. [Link](#)
227. Total Public Debt Outstanding on Apr. 8, 2011: \$14,265,383,134,019.53.
- Bureau of the Public Debt. (2011) "The Debt to the Penny and Who Holds It." US Department of the Treasury. Washington, DC. [Link](#)
228. TV Tropes. (2011) "The Brady Bunch." TVTropes.org. [Link](#)
229. When Glenn Beck left Fox News, he said: "Paul Revere did not get up on the horse and say, 'I'm going to do this for the rest of my life.' He didn't do it. He got off his horse at some point and fought in the revolution, and then he went back to silver-smithing."
- Alex Ben Block. (2011) "Glenn Beck on Why His Fox News Show Is Ending." The Hollywood Reporter. Apr. 6, 2011. [Link](#)
230. Representative Mike McIntyre (North Carolina's Seventh District), Representative Walter Minnick (Idaho's First District), Michael Oliverio (West Virginia's First District), Joe Vodvarka (Pennsylvania Senate), Brian Kelly (Pennsylvania's Eleventh District), Tim Curtis (Florida's Eleventh

District), Mark Falzon(New Jersey's Sixth District), Warren Mosler (Connecticut Senate).

Tiffany Stanley. (2010) "Meet 2010's Tea Party Democrats." The New Republic. Oct. 27, 2010. [Link](#)

231. Youth turnout in 1972 was 55.4% and has never been equaled, although 2008 came close.

Emily Hoban Kirby, Kei Kawashima-Ginsberg. (2009) "The Youth Vote in 2008." The Center for Information and Research on Civic Learning & Engagement. Tufts University. Medford, MA.

232. Theodore Roosevelt received 27% of the popular vote in 1912 when he sought to regain the presidency under the banner of the Progressive Party.

David Leip. (2011) "1912 Presidential General Election Results." Atlas of U.S. Presidential Elections. USElectionAtlas.org. [Link](#)

233. These researchers concluded that Nader did in fact cost Gore the election, but only because the race in Florida was so unpredictably close. Otherwise, he would not have made a difference. This is one of the few sources on this topic that isn't pure speculation.

Michael Herron, Jeffrey Lewis. (2006) "Did Ralph Nader Spoil a Gore Presidency? A Ballot-Level Study of Green and Reform Party Voters in the 2000 Presidential Election." Working paper. UCLA. Los Angeles, CA.

If the situation were reversed, this would compare instead to Ross Perot, who split the conservative vote in 1992, when Bill Clinton defeated George H. W. Bush.

234. Author's Note: History buffs could make arguments about Andrew Johnson and Abraham Lincoln.

235. The majority of Americans have long since desired a third major political party.

Jeffrey Jones. (2010) "Americans Renew Call for Third Party." Gallup. Sep. 17, 2010. [Link](#)

236. Real person, fictional quote.

237. Lawrence Brown. (2003) "Comparing Health Systems in Four Countries: Lessons for the United States." American Journal of Public Health. Vol. 93, No. 1, pp. 52-56.

Bruce Vladeck. (2003) "Universal Health Insurance in the United States: Reflections on the Past, the Present, and the Future." American Journal of Public Health. Vol. 93, No. 1, pp. 16-19.

238. Hajo Holborn. (1982) "A History of Modern Germany: 1840-1945." Princeton University Press. Princeton, NJ.

239. Stockholm International Peace Research Institute. (2010) "SIPRI Military Expenditure Database." SIPRI. Solna, Sweden.

240. Technically, there is one minor exception: The Republic of Chad in central Africa. The others are Eritrea, Saudi Arabia, Oman, United Arab Emirates, Israel, Jordan, Georgia, and Iraq.

Stockholm International Peace Research Institute. (2010) "SIPRI Military Expenditure Database." SIPRI. Solna, Sweden.

241. Between 1998-2011, Pharmaceuticals/Health Products spent \$2.2 billion on lobbying, Insurance spent \$1.6 billion.

The Center for Responsive Politics. (2011) "Lobbying: Top Industries." OpenSecrets.org. [Link](#)

242. E.G. Krug, K.E. Powell, L.L. Dahlberg. (1998) "Firearm-Related Deaths in the United States and 35 Other High- and Upper-Middle- Income Countries." International Journal of Epidemiology. Vol. 27, No. 2, pp. 214-221.

The list of "high-income countries" this study used differs slightly from the more modern list of "advanced economies" defined by the IMF, but they are very similar:

International Monetary Fund. (2010) "World Economic and Financial Surveys: World Economic Outlook." International Monetary Fund. Washington, DC.

243. Marc Weber Tobias. (2012) "Unsafe Gun Safes Can Be Opened by a Three-Year Old." Forbes. Jul. 26, 2012. [Link](#)
244. United Nations Office on Drugs and Crime. (2012) "Intentional Homicide, Count and Rate per 100,000 Population (1995 - 2011)." United Nations. Geneva, Switzerland.

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2040



GAGA UNLEASHES HER AMAZING POP STAR POWER!

# TALES FROM 2040

#002

JUNE  
2012

A dynamic illustration of Lady Gaga in a futuristic, neon-lit environment. She is the central figure, wearing a bright orange, form-fitting jumpsuit with a black zipper. Her blonde hair is blowing in the wind. To her left, a man in a blue hooded jacket looks on with a determined expression. To her right, a man in a purple hat and dark jacket is also looking towards the viewer. The background consists of purple and blue brick walls with glowing light effects.

**HOW LADY GAGA  
FOUGHT CRIME, AIDS,  
AND ABORTION RATES**

A SHORT STORY FROM A BRIGHTER FUTURE  
BY CHRISTOPHER CARDINAL

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# HOW LADY GAGA FOUGHT CRIME, AIDS, AND ABORTION RATES

Quick question: How much should an engagement ring cost?

If you answered “two months’ income,” you’re not alone. This has been the accepted answer since the 1960s.<sup>1</sup> But where did the “Two Month Rule” come from?

Why, from the diamond industry, of course. Specifically, from De Beers, the global diamond cartel. However, De Beers not only told us how much to spend, but also convinced us that engagement rings were something we needed in the first place.

About a century ago, De Beers had a problem. Diamonds used to be rare, worn only by royalty. However, after rich deposits were discovered in Africa in the late 1800s, prices fell 99.98 percent, from \$500 per carat down to 10 cents.<sup>2</sup> De Beers spent decades buying mines and stockpiles of diamonds, eventually controlling 90 percent of the world’s

supply.<sup>3</sup> To keep prices high, they made diamonds artificially scarce again by closing the largest mines and releasing only a small amount per year. This left De Beers with vast warehouses full of tens of millions of unsold diamonds, but Americans were not buying them.<sup>4</sup>

At that time, diamond engagement rings were far from the norm. Instead, grooms- and brides-to-be usually gave each other small, inexpensive gifts. Even the more well-to-do did not give diamonds, as they considered other gemstones, like rubies, opals and sapphires, to be more exotic and appropriate for expressing love.<sup>5</sup>

To change this, in 1938 De Beers hired N.W. Ayer & Son, the nation's first advertising agency. Ayer took a multipronged approach, which included everything from a national ad campaign to hiring people to speak at high school assemblies, telling girls that only proposals accompanied by diamond rings were valid.<sup>6</sup>

Central to the strategy were America's royalty: celebrities. Ayer arranged to have famous actresses and models covered in diamond jewelry.<sup>7</sup> De Beers gave diamonds to fashion designers and society writers to talk about the growing trend. Decades before "product placement" was a buzzword, De Beers paid to insert diamonds into the plots of movies and even change their titles to cast diamonds in a positive light.<sup>8</sup>

Their efforts worked. Within just three years, diamond sales increased by over half.<sup>9</sup> In 1947, Ayer created what is widely regarded as the best advertising slogan in history: "A diamond is forever,"<sup>10</sup> and by 1950, four out of five American brides received a diamond engagement ring.<sup>11</sup> De Beers' advertisements initially suggested that men spend a

month's salary,<sup>12</sup> a figure they quickly doubled<sup>13</sup> and later cemented with ads that asked, "How can you make two months' salary last forever?"

For decades, Hollywood continued to glamorize diamonds, from Marilyn Monroe singing "Diamonds Are a Girl's Best Friend" in *Gentlemen Prefer Blondes* to Sean Connery playing James Bond in *Diamonds Are Forever*, a film that took its title straight from De Beers' slogan. By getting celebrities to popularize their ideas and reinforcing them with messages across multiple media, De Beers convinced Americans to believe three ideas: Men should buy engagement rings, they should be diamond rings, and they should cost two months' salary. To this day, we, as a society, continue to follow these rules.

Despite growing awareness of the slavery, torture, and genocide behind most diamonds, the vast majority of American men still give them as a symbol of romantic love. What's more, we consistently shell out a sum in the ballpark of two months' salary, before taxes.<sup>14</sup> Not because any of this makes logical sense, but because it's a "rule" we all know we are expected to follow.

Before De Beers came along, buying an expensive diamond engagement ring was almost unheard of. However, our perception of what is normal human behavior changed rapidly when a few high-profile celebrities convinced us we should act differently.

## **CHANGING EXPECTATIONS**

Speaking of romantic love, here's another quick question: When is the soonest a person should expect to have sex in a new relationship?

That's an easy one. We all know the answer: three months. However, not too long ago the answer was different. The "Three Month Rule" for sex has only been around since 2013, making it a more recent invention than the "Two Month Rule" for engagement rings.

Back in the early 2000s, the answer was not three months; it was three *dates*. Just like the "Two Month Rule," this "Third Date Rule" was also popularized by celebrities, like Jennifer Anniston on *Friends* and Sarah Jessica Parker on *Sex and the City*. Many sources reported that most people had sex on or before the third date, and it was widely accepted that if a couple had not become physical by then, the relationship wasn't going anywhere.<sup>15</sup>

This casual approach to sex led to several negative consequences in the United States. To begin, it contributed to a culture in which half of all pregnancies were unintended,<sup>16</sup> and about four in ten of those – well over a million total<sup>17</sup> – were ended by abortions each year.

This phenomenon had an even more detrimental effect on the spread of disease.<sup>18</sup> Having sex so early in relationships meant coming into contact with more partners, which meant more risk. Moreover, these partners were by definition people who had casual sex, meaning they likely also had sex with other new partners more often, who in turn also frequently changed partners, and so on.

People were exposing themselves to dizzying numbers of potential sources of sexually transmitted diseases, and a single outbreak could spread rapidly. This helped explain the estimated 19 million new STD infections each year,<sup>19</sup> almost half of which were among people under 25.<sup>20</sup> This was not surprising, considering American teens had sex

around as much as their counterparts in Canada and Europe, but were more likely to have shorter and less consistent sexual relationships and were less likely to use contraceptives.<sup>21</sup> Several STDs were on the rise. Reported cases of chlamydia increased almost 20 percent between 2006 and 2009, and syphilis, which had almost been eradicated two decades earlier, increased almost 40 percent in the same three-year period.<sup>22</sup>

These diseases were easily curable, unlike HIV. However, thanks to advances in antiretroviral drugs,<sup>23</sup> HIV was no longer a quick death sentence. While this was great news for anyone with the disease, it also meant an ever-growing number were living with HIV, an estimated one in five of whom were unaware they had it.<sup>24</sup> This also meant that the disease, which was once considered only a problem for the young, was soaring among older people. In 2009, those over 50 accounted for one in six new HIV infections and over a third of people living with AIDS in America.<sup>25</sup>

## **AMERICA STANDING STILL**

In the early 2000s, HIV was a different problem in the United States than in much of the rest of the world. In sub-Saharan Africa, home to almost 70 percent of the world's HIV-positive population,<sup>26</sup> there was limited access to health services and contraceptives<sup>27</sup> and a host of laws that punished homosexuality with imprisonment or death.<sup>28</sup> Widespread ignorance led women to believe men could not have AIDS if they looked healthy,<sup>29</sup> and infected men raped young virgins on the mistaken belief it would cure them of their disease.<sup>30</sup> Some lived in cities in which half the population and 70 to 90 percent of the prostitutes had HIV.<sup>31</sup> On top of that, people had to contend with crushing poverty, famine, unclean drinking water, illiteracy,



unstable governments, widespread violence, and countless civil rights violations.

In spite of these conditions, through a combination of social programs, the rate of new HIV infections dropped by about a third in sub-Saharan Africa between 2001 and 2009.<sup>32</sup> Africa was not the only region making improvements; most of the world was as well. During that same period, the worldwide rate of new HIV infections declined by a quarter.<sup>33</sup> Meanwhile, in the United States, the number of new infections had been about the same for two decades.<sup>34</sup>

The rest of the world was also making progress in the area of reproductive health. Between 1995 and 2008, the rate of unintended pregnancies dropped almost 30 percent in developed regions and 20 percent in developing regions. The only region of the world that failed to improve during that period was North America.<sup>35</sup> Similarly, between 1995 and 2003, developed nations reduced abortion rates by a third and even developing nations reduced theirs by 15 percent. Again, during that time, America's abortion rate remained almost unchanged.<sup>36</sup>

We had few excuses for our lack of progress. Both STDs and unintended pregnancies were more prevalent among Americans with lower incomes,<sup>37</sup> but "poor" is a relative term. What we consider poverty in the United States is still a better situation than average life in many developing countries, which, unlike America, were continually making headway against their problems.

By contrast, along with drastically better living conditions, the United States had high levels of sexual literacy, AIDS awareness, and access to contraceptives and healthcare.

Yet no one could have guessed that by looking at how we compared to our peers. Among developed nations, the United States had the highest rate of HIV,<sup>38</sup> one of the highest unintended pregnancy rates,<sup>39</sup> and the highest teen pregnancy rate – three times higher than Canada and about ten times higher than Switzerland.<sup>40</sup>

Despite our privileged lifestyles as Americans, we had only our carelessness to blame.<sup>41</sup> One of the main reasons: We had stopped using condoms as often.<sup>42</sup> Some said this trend began among heterosexuals, when they realized that HIV was primarily spread through sexual contact between men.<sup>43</sup> Others said gay men had become less fearful due to advances in antiretroviral drugs, seeing HIV as a manageable chronic condition rather than a deadly disease to avoid at all costs.<sup>44</sup>

However, these problems affected everyone. About half the people living with HIV were gay or bisexual men, with the other half split evenly between women and straight men,<sup>45</sup> and no one was being careful enough. Seven out of eight people who contracted HIV did so through unsafe sexual contact,<sup>46</sup> and failed contraception only accounted for 5 percent of unintended pregnancies. Most of the time, neither partner used any at all.<sup>47</sup>

We caused our own problems by voluntarily engaging in what we knew to be risky sex.<sup>48</sup>

We knew we could reduce the rates of unintended pregnancies, abortion, and HIV by being a little more sexually responsible. But who was influential enough to get us to change?

## LADY GAGA

Many contributed to this behavioral shift, but most of the credit rests on the shoulders of one woman: Stefani Joanne Angelina Germanotta. Known worldwide as an artist, fashion designer, and philanthropist, Germanotta is even more famous as a singer under her stage name: Lady Gaga.

Gaga has set many records in the 32 years since she released her first album. Along the way, she became the youngest recipient of the Grammy Lifetime Achievement Award<sup>49</sup> and she unseated Elvis Presley and Mariah Carey to become the artist to spend the most cumulative time at number one.<sup>50</sup>

She has also set records with the money she has earned. Over a decade before she introduced her high-end clothing line, Gaga had already made a fortune through music sales, promotional agreements, and especially touring. Gaga's 2009-11 *Monster Ball Tour* was the highest-grossing tour for a debut artist<sup>51</sup> and one of the most successful tours of all time, earning amounts similar to those of Bruce Springsteen, Cher, The Rolling Stones, and U2 near the end of their careers, yet Gaga had only begun.<sup>52</sup>

In 2022, she became the youngest self-made female billionaire,<sup>53</sup> as well as the first to sign The Giving Pledge, the effort started by Bill and Melinda Gates and Warren Buffett to convince the wealthiest Americans to give most of their riches to charitable causes.<sup>54</sup> Notably, she was also the first singer in history to reach the ten-digit mark with her bank account.<sup>55</sup>

However, even at the very beginning of her career, Gaga was already breaking records.

In 2008, her first single, *Just Dance*, became a number one hit in six countries and was nominated for a Grammy.<sup>56</sup> Later that year, her second single, *Poker Face*, reached the top of the charts in 20 countries and was nominated for three Grammys, winning one.<sup>57</sup> *Poker Face* spent a record-breaking 83 weeks on Billboard's US Hot Digital Songs chart,<sup>58</sup> and with subsequent singles *LoveGame* and *Paparazzi*, Gaga became the first artist to release four number one pop music hits from a debut album.<sup>59</sup>

Over the next few years, Gaga also broke records in online popularity. She was the first artist to have her videos viewed over a billion times,<sup>60</sup> and at various points she was the most searched-for female on Google,<sup>61</sup> the person with the most followers on Twitter,<sup>62</sup> and the most "liked" living person on Facebook.<sup>63</sup>

## **BORN THIS WAY**

Even her harshest critics had to admit that her marketing prowess was legendary. In 2011, to promote her second studio album, *Born This Way*, Gaga appeared on dozens of television shows, including *American Idol*, *The Oprah Winfrey Show*, *Good Morning America*, and her own HBO concert special.<sup>64</sup> However, Gaga also promoted her music in many non-traditional ways, including making several deals with the giants of the tech industry.

After collaborating on a relief effort for victims of an earthquake and tsunami in Japan, she partnered again with web game maker Zynga to create *GagaVille*, an extension of *FarmVille* (one of the most popular games on Facebook),<sup>65</sup> through which fans could hear songs from *Born This Way* before it was released.<sup>66</sup>

Within hours of releasing one of the songs on the album, *Edge of Glory*, Gaga asked fans via her website to post videos of them singing along or dancing to the music. About a week later, selected videos appeared with the song in an ad for Google Chrome<sup>67</sup> that aired during the season finale of *Saturday Night Live*. The episode, hosted by Justin Timberlake just two days before the album launch, featured Gaga not only singing, but also participating in several skits, a rarity for musical guests.<sup>68</sup> The day it was released, Amazon sold the album for 99 cents to promote its new cloud music service, an offer so popular that it crashed their servers, prompting them to repeat the sale three days later.<sup>69</sup>

Gaga also showed considerable savvy in the emerging realm of mobile marketing. Disney sold her songs along with a popular game that rewarded players for tapping and shaking their phones along with the beat.<sup>70</sup> Starbucks hosted a digital scavenger hunt that started by using a mobile phone to scan a code at their stores and ended with Lady Gaga-themed prizes.<sup>71</sup> Gaga also signed autographs at Best Buy, who gave free copies of the album to purchasers of select mobile phones.<sup>72</sup>

As a result of all her efforts, Gaga broke even more records. Her single *Born This Way* debuted at number one to become the one-thousandth leader of the Billboard Hot 100 chart, staying at the top for six weeks.<sup>73</sup> Within five days, she sold more than a million digital copies, making her the fastest-selling artist in *iTunes* history.<sup>74</sup> The song reached an audience of over 78 million the week it began its airplay, the highest opening since the Radio Songs chart combined all radio formats in 1998.<sup>75</sup>

The album, also called *Born This Way*, reached the top of the charts in 25 countries. Just like the single, the album also sold over a million copies in the first week, outselling the next 42 albums in America combined,<sup>76</sup> and was a major contributor to the music industry's first gain in album sales in seven years, owed entirely to digital sales.<sup>77</sup>

In 2011, Gaga was named the most charitable celebrity for the second year in a row,<sup>78</sup> in part for creating the Born This Way Foundation, a non-profit dedicated to ending youth bullying and creating a “new culture of kindness, bravery, acceptance and empowerment.”<sup>79</sup> Yet all the promotion, popularity, and philanthropy connected to *Born This Way* still paled in comparison to what Gaga did next.

## **SLOW DOWN**

Following the success of *Born This Way*, Gaga's next album was eagerly anticipated around the world. Her publicity machine fired up a full six months before its release, putting together more corporate partnerships and promotional deals than ever before.

Gaga herself, however, who had a habit of making several high-profile appearances a day, was almost nowhere to be seen. Instead, she was holed up in her recording studio for weeks on end. She uncharacteristically canceled a handful of promotional events, apologizing to fans and citing her need to spend more time on the album. Representatives said that Gaga was “hard at work on a revolutionary project unlike anything the music industry has seen before,” but other than that, gave no details. Reporters snapped photos of several other musicians entering her studio, but when questioned, they were just as tight-lipped as Gaga's team,

leading the press to call what Gaga was up to “the best-kept secret in the entertainment industry.”

Rumors swirled. Was she sick?<sup>80</sup> Did she have a breakdown? An addiction? Between the mystery of her reclusiveness and the fanfare of a much-hyped countdown, Gaga frenzy hit a fever pitch as her deadline loomed.

### **SINGLE RELEASE**

Her fans, as it turned out, had nothing to worry about. Right on schedule, on May 31, 2012, Gaga released the eponymous single from her new album: *Slow Down*. Also, just as promised, it was different. Very different.

It had all the hallmarks of her previous smash hits. A powerful intro with a catchy hook. Check. An irresistible rhythm and a creative chord progression. Check. An infectious melody that stuck in our heads for days at a time. Check. *Slow Down* had a brand new, unique sound that forced us to dance and made us want to sing along, but something was missing: the words.

The song’s structure was distinctly lyrical. It had three well-defined verses and a bridge interspersed with a chorus. However, Gaga sang only two phrases throughout the entire song: “Slow down,” which started each of the first three bars of the chorus, and “Slow down and think about it,” which ended the chorus. After the music built to a crescendo at the end of the song, it cut to silence for Gaga to repeat the “Slow down and think about it” hook, and that was it. Other than that, she only vocalized some meaningless syllables and sustained notes, and even then, her voice was so muted that it was barely audible.

Fans and critics alike were confused. *Slow Down* still opened at number one, and the blogosphere erupted in a debate over whether it deserved to do so. Some said Gaga was resting on her laurels and claimed that if any other artist released the song, it wouldn't even make it onto any chart. Others defended her, claiming that anyone who didn't like it had no appreciation for modern art. After all, Gaga once wore a dress made entirely of raw meat and another made of Kermit the Frog dolls; an odd song was just her being avant-garde.

On the other hand, the song obviously sounded like it should have had lyrics, and their absence frustrated several critics into panning *Slow Down* in their reviews. One called it "painfully incomplete." Another: "One track short of a masterpiece." Another: "The song has no words. Does the empress have no clothes?" Yet another quipped that, "Exhausted from all the 'work' she's been putting in, Lady Gaga must have accidentally shipped the karaoke version, since all we hear are the backup vocals."

In an article titled *Has Lady Gone Gaga?* one journalist asked the question on the minds of even her most die-hard fans: "We waited six months for this?"

### **PRESS CONFERENCE**

It was not until almost a week later that the song's true genius was revealed.

On June 5, 2012, Gaga held a press conference in Los Angeles. Rather than a Hollywood club or her record label's Santa Monica studio, though, she spoke from a small grassy platform in the quad outside the UCLA School of Medicine.<sup>81</sup> In addition to the unconventional location, those in attendance were not the typical crowd to cover pop



musicians. The press was notified in advance that space was limited and that priority would be given to hard news reporters over those covering the entertainment industry.

Writers from *Rolling Stone*, *Spin*, and *NME* were still welcomed, but were relegated to the back rows to make way for representatives from the major American news outlets. Overall, every aspect of the event had the look and feel of a presidential press conference rather than a musician's publicity stunt, right down to Gaga herself.

The singer was infamous for showing scandalous amounts of skin while wearing outfits made of outlandish materials like mirrors or plastic bubbles. This day, however, Gaga wore a stylishly tailored pinstriped suit. Instead of a wig she wore her natural hair in a tight bun, and in the place of oversized shades were tasteful wire-rimmed glasses. Through her keen fashion sense, Gaga transformed herself from a pop icon into a dignified stateswoman. Only her heavy eye makeup and high hemline separated her from the image of a visiting foreign dignitary. Yet she wasn't just wearing a costume. She spoke with poise and grace that belied her mere 26 years of age:

*This is where it started.*

*On this day, 31 years ago, researchers working here at UCLA were part of the small team that first identified AIDS among five gay men living in Los Angeles.<sup>82</sup>*

*Since then we have learned much.*

*We have learned that AIDS affects everyone, regardless of race, income, or sexual orientation. We have learned that AIDS is caused by HIV, and how to test for it. We have learned that HIV is transmitted from person to person through unprotected sex and sharing needles. Although we have not yet learned how*

*to cure it, we have learned how to suppress HIV with drugs to impede the onset of AIDS.*

*Most importantly, we have learned how to prevent the spread of HIV.*

*But we are not doing this.*

*The annual number of new HIV infections in the United States has been almost the same for 20 years.<sup>83</sup> Just as we were starting to beat this disease, we became complacent.<sup>84</sup>*

*This is where it started. Now is when we end it.*

...

*Last week I shared Slow Down, which, as you already know, is incomplete.*

*This is because Slow Down is not a song. It is an idea.*

*Slow Down is a call to take control of our lives. To love ourselves enough to make better choices. To live up to our potential as the kings and queens of this amazing world.*

*Slow Down is an idea, but it is not just my idea.*

*Over the last year I have been honored and humbled to work with several of the most talented and creative minds in the industry.*

*Each artist used my song as a musical canvas, adding to it their own music and lyrics to spread the message of Slow Down in their own words.*

*The sound you heard last week was not a finished product. What you heard was the beginning of a movement.*

*The first of these collaborations will be released tomorrow: Slow Down by Justin Timberlake. On Friday: Slow Down by Elton John. Saturday: Slow Down by The Rolling Stones. Sunday: U2. Monday: Taylor Swift.*

*In the following 30 days, you will also hear versions of Slow Down by Aerosmith, Beck, Justin Bieber, the Black Eyed Peas, Kenny Chesney, Coldplay, Daft Punk, Neil Diamond, Gloria Estefan, Green Day, Jay-Z, Billy Joel, Alicia Keys, Jennifer Lopez, Maroon 5, Bruno Mars, Muse, One Direction, Paul McCartney, Reba McEntire, Sarah McLachlan, Moby, the Red Hot Chili Peppers, Carlos Santana, Bruce Springsteen, George Strait, Barbra Streisand, Weezer, Kanye West, and Stevie Wonder.*

*Over 85 artists have completed songs for the Slow Down Project so far, which means a new song will be released every day until at least the end of August, and more are still in production.*

*Each single will be available for individual sale through Amazon, and anyone who pre-orders or buys the upcoming Slow Down album will receive, in addition to the fifteen new songs by me, a free copy of every different Slow Down single via digital download as each is released, plus access to interviews with the artists and behind-the-scenes footage from the recording studio.*

...

*The music industry has a long history of supporting the fight against AIDS. David Geffen, after whom the building behind me is named, gave 200 million dollars to this very school, the largest donation of its kind, as well as millions to groups like AIDS Project Los Angeles and AIDS Action in Washington.<sup>85</sup>*

*But you don't have to make a fortune to make a difference.*

*One hundred percent of the proceeds from every Slow Down single as well as from the Slow Down album will be split between four charities working to fight HIV and AIDS. Details can be found at [SlowDownProject.com](http://SlowDownProject.com).*

*You don't have to spend a dime, though, to help in the most impactful way. You can help by joining the movement.*

...

*In many of these songs, you will hear references to "three months" or "The Three Month Rule."*

*The Three Month Rule is this: Wait at least three months after dating a new partner exclusively before having sex.*

*This is not an arbitrary period of time. Three months is the soonest after possible exposure that a negative HIV antibody test can be trusted to be accurate.<sup>86</sup>*

*The Three Month Rule does not replace other safe sex practices. We still need to be tested for STIs frequently and we still need to use proper protection every single time.*

*Sex is beautiful, but when we don't enjoy it responsibly, it can be destructive.*

...

*For over 30 years we have lived in fear.*

*This is where it started. Now is when we end it.*

*Help keep sex beautiful. Join the movement. Slow down.*

*By working together, we will be the generation to beat AIDS.*

When Gaga finished speaking, the questions from reporters were initially drowned out by the cheering from thousands of UCLA students piled up behind the ring of security guards to get a peek at her. Eventually she quieted them with promises of autographs and opportunities to take photos with her after the press conference. She stayed

for another three hours meeting with fans before leaving to catch a flight to France.

There, she repeated the entire event at the Pasteur Institute in Paris, where HIV was first discovered, delivering a similar speech in flawless French to international news outlets like BBC World News, Reuters, and Al Jazeera, as well as the United Nations and the World Health Organization. She received another standing ovation there, although this time it was from the press.

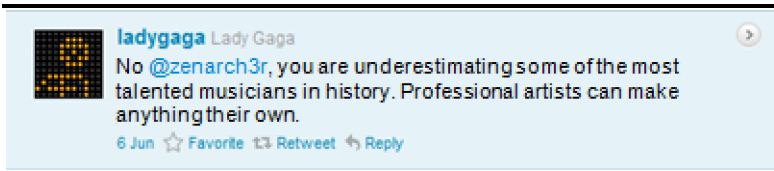
Between the headlines generated and the steady stream of singles from A-list artists being released, it soon became virtually impossible to look at a newspaper or turn on a radio or television without being bombarded with the message of *Slow Down*.

The movement had begun.

### MORE BROKEN RECORDS

When fans learned they would get at least 100 songs for eight dollars, which would go entirely to charity, they reached for their credit cards and drove a digital stampede to Amazon. In fact, Gaga broke the record for album presales within a few hours of the first press conference. Detractors soon predicted people would quickly tire of hearing the same song over and over. Gaga fired back at one critic on Twitter:

Illustration: Tweet from Lady Gaga



Gaga was right. Despite being based on her work, each of the singles turned out to be dramatically different. They were not just remixes. Each had completely unique lyrics sung by different vocalists, and Gaga only performed backup vocals or harmonies in most versions. One artist transformed the melody into soul music; another sped the tempo up to a Texas two-step. In fact, the only person who made a version that sounded like Gaga's original single was Madonna, who said it was a tongue-in-cheek payback for Gaga using a chord progression that made *Born This Way* sound uncomfortably similar to her own 1989 hit *Express Yourself*.<sup>87</sup> As far as all other versions were concerned, if they did not all share the same name, casual listeners would not even notice the songs were related. For example, in their last song recorded together,<sup>88</sup> The Beastie Boys turned *Slow Down* into an old school rap, rapidly trading lines between the three singers and mixed samples of Gaga:

*AR: I'm ready like a soldier on a day furlough*

*MD: And she's tasty like spaghetti with a great merlot*

*MCA: I got rhymes like Eddie Poe and Hank Dave  
Thoreau*

*(Slo-slo-slo-slo-slow slow down)*

*ALL: But you gotta go slow until you know you know*

...

*MCA: I got a winnin' hand 'n' I'mma bet before I show  
it*

*MD: I'mma take my time 'n' I'm not gonna blow it*

*AR: So I can live to carpe diem just like a dead poet  
(Slow dow-dow-dow-dow down slow down)*

*ALL: 'Cuz you know you gotta slow it 'til you know that  
you know it*

Katy Perry, on the other hand, slowed the song down to a pop ballad from a love-struck woman to the man who just ended their relationship. In it, she begs him to wait three months before moving on to a new woman, with Gaga providing backup vocals:

*(Slow down) You left in September  
 (Slow down) Just wait 'til December  
 (Slow down) Don't you remember  
 The way you felt before, make sure we're really over  
 (Slow down and think about it)*

In an interview, Perry said the protagonist's take on the Three Month Rule was as much about the former boyfriend's well-being as the sting of being replaced:

*She still loves him, so of course she doesn't want him to jump right into bed with someone else – but she also cares about him and doesn't want him to do something stupid because he's lonely.*

*Breakups are awful, but they're part of life. Rebound sex in general is just a bad idea. Everyone gets hurt.*

Also, the participating artists were spread across so many genres that most people did not hear every version, especially if they stuck to only one radio station. In the first month, Spanish-language stations only played two different *Slow Down* songs, country stations played three, and adult contemporary played five or six. Some stations played every new single the day each came out, regardless of format, but only stations with Top 40 Mix or Dance formats played more than a handful of them consistently afterward.

Gaga's unprecedented move of marketing genius kept various versions of *Slow Down* at the top of the radio

charts for months, as listeners called in with requests to hear each new artist's take on the theme.

Since each song was credited to the main vocalist (e.g., "*Slow Down* by Beyoncé feat. Lady Gaga"), Gaga herself was technically ineligible for many sales records, but collectively the songs set records that had never existed before. For example, a few weeks after *Slow Down* was released marked the first time that over ten of the songs on the Top 40 Chart had the same name. Also, while a few performers had recorded songs that appeared on two charts at once (notably country, Latin, and Christian singers that crossed over to appeal to the pop music crowd), Gaga became the first contributing artist to appear on twelve different Billboard Top 10 charts at the same time, including Pop, Adult Contemporary, Dance/Club, R&B/Hip Hop, Rap, Rock, Hard Rock, Alternative, Country, Latin, Latin Pop, and Christian.

Through all this radio play, *Slow Down* reached millions of people in the United States alone who would otherwise never have heard Gaga's music. Gaga struck while the iron was hot by making her album available for sale via text message. Listeners could act while the desire was fresh in their minds by adding the cost of the album to their mobile bill, receiving a message back with a code that unlocked the album at Amazon. A similar practice is common today, with about 30 percent of music sales made via mobile phone, including most sales to minors (since they do not have credit cards), but at the time this method was almost unheard of.

Regardless of how they bought it, fans were treated to new songs and videos added to their Amazon Media Library every day. In the modern era of all-digital goods, bands



routinely add photos, videos, and even new songs to albums for months after they are released, and most reward early buyers with even more extras. Everyone wins – artists get more opportunities to connect with fans, consumers get more for their money, and retailers like Amazon and Apple get more traffic – but again, at the time, the concept of a living album was brand new. This helped steer the music industry’s slow-turning mentality away from treating albums only as permanent, unchangeable goods and helped Gaga sell more copies of her album before it was released than most albums ever sell at all.

When the *Slow Down* album was finally released, it didn’t disappoint. In addition to the original, nearly wordless version of the *Slow Down* single, it included 14 other new tracks by Gaga, four of which also reached the top of the pop charts.

This was back when music was still distributed on compact discs, although the practice was already rapidly declining, with digital sales surpassing physical media in 2012.<sup>89</sup> However, even though the CD cost twice as much as the digital version, it still sold well. It included a photo album, liner notes, and a printed code that unlocked all the *Slow Down* singles on Amazon, plus two dozen bonus remixes.

But the most remarkable feature of the physical album wasn’t inside the package; it was the package itself. The album cover appeared to be an illuminated traffic sign that flashed between the words “LADY GAGA” (with an image of a person) and “SLOW DOWN” (with a skeleton), a convincing illusion created by a grid of raised holographic discs. The design was based on an actual traffic sign introduced in New York City in 2011 that flashed “SLOW DOWN” to drivers exceeding the speed limit.<sup>90</sup>

Illustration: Holographic album cover

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The entire cover was printed on thick vinyl and backed with strong adhesive, making it a durable sticker that fans soon proved could be put almost anywhere.

## THE MOVEMENT SPREADS

The sticker showed up on traffic signs, store windows, and the walls of public buildings, flashing the message of *Slow Down* to all passersby. Even more fans put the stickers on personal items, and it wasn't uncommon to see people with several copies of the album cover on their cars or school notebooks. Since everyone knew that all proceeds went to charity, the stickers served as physical proof of their donation, a badge of honor in the fight against AIDS, and multiple stickers signified a larger contribution.

In fact, initial sales reports showed an abnormally large number of people bought multiple copies of the CD. In the resale market, simple economics made the cover worth more than the rest of the album, as the demand for the sticker was much higher than the demand for all those extra CDs. There was also a huge spike in vinyl record

sales, presumably to get the foot-wide version of the sticker. Eventually, to prevent waste, Gaga simply sold the stickers directly online.

Banksy, an anonymous graffiti artist with an international following, painted a 15-foot image of the skeleton from the album cover on the side of a government building in his hometown of Bristol, England. His work made headlines and photos spread on the internet, inspiring copycats to repeat the act in cities around the globe. Another artist distributed a set of stencil patterns online, prompting activists who had never before touched a can of paint to tag public spaces with “SLOW DOWN” or add the skeleton, which had become the icon of the movement, to countless traffic signs that already had the words on them. Between budget cuts to local cleanup crews and the positive nature of the message, most cities did not rush to remove them.

## **GAGA GARAGE**

Fans spread the word with stickers, spray paint, and skin (the skeleton remains a popular tattoo even today), but they also did so through music.

Rather than slamming people who borrowed her work with DMCA takedowns and copyright violation lawsuits like so many artists of the day, Gaga embraced them; in fact, she encouraged them. Along with the release of her album, Gaga announced a contest called the Three Month Challenge. For 90 days, fans were invited to make their own versions of her song and share them at *SlowDownProject.com*, where they would be rated by their peers. The highest-rated entries would be reviewed by a panel of judges from the recording industry, including Gaga. The panel would choose ten winners, who would

receive prizes and the honor of having their songs added to the *Slow Down* living album.

However, Gaga did not want to limit the contest to only those with access to professional audio equipment. To that end, her team partnered with Apple to create *Gaga Garage*, a free online application powered by the company's popular *GarageBand* music creation software.

*Gaga Garage* made it easy for anyone to make their own songs. The main application worked on all platforms and required no download or installation, running instead through any web browser, and operated in two modes. "Lyrics Mode" was simple and straightforward. Writers could use a simple text editor to modify the song's words, and singers could record vocals while the music played and the lyrics appeared on the screen, similar to karaoke. All they needed was a microphone or a webcam, or, if they preferred, they could download the *Gaga Garage Lite* mobile application and sing into their *iPhone*.

Switching to "Music Mode" revealed a fully-featured audio and video editing application which, just like *GarageBand*, made its powerful features pleasantly easy-to-use. It was preloaded with all the same audio content that Gaga had given to her fellow artists when she asked them to make their own versions of *Slow Down*. This included the unmixed tracks for the original song in six different keys and at seven different tempos, 15 variations on the melody, 30 percussion tracks, and over 2,000 words and sustained notes sung by Gaga as backup vocals, plus a continual influx of audio samples from new versions of the song as they were released. Gaga also shared 90 minutes of previously unseen footage which fans could use to make

their own high-definition music videos. Anyone who wanted more could upload their own digital content.

The design of *Gaga Garage* encouraged collaboration. All work was saved online and could be edited in either mode interchangeably. Advanced users could export to and import from the *GarageBand* native format if they wished to use a professional music studio.

Each musical aspect was rated individually, so songs with good lyrics but poor production quality attracted talented singers, who asked to be added to the project so they could record the vocals. These in turn caught the attention of semi-professional musicians and aspiring DJs who arranged and mixed the songs, then others made accompanying videos.

Such an experimental project might have fizzled under anyone else's care, but Gaga's online marketing prowess was unparalleled. Tim O'Brien, vice president of business development at Disney Mobile, said:

*I've never seen anything as powerful as when Gaga hits her social media channels.<sup>91</sup>*

According to a community manager at USC:

*Gaga and her team are some of the best marketers around; they understand the importance of integrating social with traditional media, engaging audiences in real-time, and most of all, telling a story that is relatable and worth spreading.<sup>92</sup>*

Gaga constantly plugged the contest, but more importantly, she integrated tools into *Gaga Garage* that let fans easily promote their creations through social

networking tools like Facebook and Twitter. Soon, the internet was abuzz with thousands of versions of her song.

As it was, the project was a runaway success for everyone involved. Gaga connected in a meaningful way with her fans, who translated her message into their own words and shared it with their friends. Apple exposed its award-winning software to hundreds of thousands of potential customers and made waves throughout the tech industry by showing off the power of its *iCloud* computing platform. (Today, of course, virtually all consumer software applications are delivered via cloud computing, but it was still a relatively new concept at the time.)

The biggest winners, however, were the fans themselves. Through *Gaga Garage*, thousands of people started successful projects with only a portion of a song, then found others to fill in the gaps in their skillsets until they had a polished result, forming impromptu “bands” along the way with people they had never met before. This innovative use of technology helped fans discover hidden talents, make new friends, and experience the fulfillment of contributing to something greater than they could accomplish on their own.

The volume of truly impressive work submitted to *SlowDownProject.com* was overwhelming.<sup>93</sup> Gaga and the panel of judges ultimately chose 16 songs to add to the *Slow Down* album, and their creators ended up receiving a lot more than the prizes promised in the contest details.

## GAGA ON TOUR

Gaga's *Slow Down Global Tour*, which had sold out in over 30 countries,<sup>94</sup> began shortly after the album was released. During the very first show, the crowd knew that *Slow Down* was about to be performed when the stage lit up with huge traffic signs playing animations synced to the complex choreography of a troupe of dancers covered in lights.

The audience was nonplussed when Gaga began singing her backup vocals to a recording of Justin Timberlake's radio version of the song. They had paid to see a live show; then again, how else would Gaga perform a song that had no words of her own? But they were appalled when the music started skipping with the sounds of a CD player malfunction, making it obvious that Gaga had been lip syncing.

"Stop it, stop it, cut the music," boomed a familiar voice. It came from one of the dancers, who removed his costume to reveal he was, in fact, Timberlake himself. "Ms. Gaga," he continued, "I told you we had to do this live."<sup>95</sup>

The crowd turned ecstatic as Timberlake and Gaga launched into the real performance: a rock adaptation of his *Slow Down* love song, his first single since focusing on his acting career in 2007.<sup>96</sup> Fans were similarly floored at the second show when a gigantic turntable brought Elton John and his piano to the stage to perform his own version of *Slow Down* with Gaga. Although she never repeated the CD-skipping prank (the cat was out of the bag after the first show), Gaga also never announced before a show who the guest singer would be, and sometimes surprised her audiences with up to three other artists in one night.

After the Three Month Challenge ended, Gaga added yet another twist by incorporating a version of the song made by a different group of fans into each show. She played their music, broadcast their videos on a huge projection screen, and, just like the cameos from their famous counterparts, provided backup vocals while the amateur singers performed live. Afterward, everyone who worked on the song got to take a bow from center stage. By the end of the tour, Gaga was joined by the creators of all 16 winning entries as well as the individuals and groups behind over 90 other versions of the song at various stops around the world. These acts were tame compared to Gaga's normal theatrics (partially due to the insurance risk of inexperienced performers on the stage) and they didn't always go smoothly, but fans were understanding, and those who weren't consumed with jealousy cheered just as loudly as for Gaga herself.

## CELEBRITIES

Adding their voices to those of Gaga's fans were many other celebrities who also joined the movement. Ultimately, the Hollywood elite played just as important of a role in the spread of the Three Month Rule as they did with the establishment of the Two Month Rule for engagement rings. To begin, the success of the Slow Down Project sparked a trend of discussing sexual responsibility in popular music that lasted for years. In fact, Gaga's movement touched off a wave of top ten songs that promoted not just waiting, but abstinence, a topic previously restricted to the narrow niche of Christian music.

A few months after her version of *Slow Down* aired, Beyoncé released *You're Worth the Wait*, which



encourages women who want to remain abstinent to stick to their guns. Many saw the song as a logical extension of her hit *Single Ladies (Put a Ring on It)*, which was named the best song of 2008 by Rolling Stone<sup>97</sup> and spent three weeks at number one before being dethroned by Gaga's debut single.<sup>98</sup> However, more careful listeners knew that, despite being commonly misunderstood to advocate marriage, *Single Ladies* was actually about a woman telling an ex she had moved on (and flaunting it). By contrast, *You're Worth the Wait*, which also featured Beyoncé's husband Jay-Z, overtly applauds women who want to wait until marriage and shames men who try to persuade them to abandon their principles.

Jessica Simpson, who, despite four top ten albums<sup>99</sup> and a billion-dollar fashion line<sup>100</sup> considers remaining a virgin until her wedding night her crowning achievement,<sup>101</sup> declined to make a *Slow Down* song, saying she supported the idea but that the message was not strong enough. Simpson nevertheless made a return to radio<sup>102</sup> with *Ravenous*, a steamy account of the pleasure that a man could expect in her bedroom – but only after they were married. Simpson, who was a poster girl for sexual restraint long before Gaga arrived on the scene, said she got the idea from a well-known line from Cervantes' *Don Quixote*: “Hunger is the best sauce in the world.”<sup>103</sup>

Other songs warned of the dangers of deceitful lovers. Soul singer Adele recorded *The Final Chapter*, a melancholy piece about a friend who died after contracting HIV from a man who knew he had it, but lied. Apart from Adele's preternatural vocals, the song stood out on the radio due to its structure, clocking in at under two minutes and containing only a long piano solo, then a single verse:

*If all promised were done  
Then I'd still hear your laughter  
If all spoken were true  
Then I'd still feel your love  
If our lives were a book  
There might be one more chapter  
But all stories must end  
Even those about us*

Along a similar vein, Faith Hill, accompanied by husband Tim McGraw, recorded *Beautiful Stranger*, which tells of a whirlwind romance that takes a heartbreaking turn. A young woman overhears her new beau talking to another woman, repeating the same sweet things he said to her the night before. She comes to discover that he has used those lines, along with his good looks, to seduce hundreds of women, and he doesn't even remember her name.

According to Hill, the cautionary tale was inspired by the story of a family friend who had remained abstinent well into her twenties and intended to wait until marriage. However, she became depressed after her fiancé broke off their engagement, and soon thereafter had a one-night stand with a handsome man she met at a bar. As a result, she became pregnant the very first time she had sex.

Of all the genres touched by Gaga's movement, though, the largest shift was felt in hip-hop and rap music. After decades of criticism for its glorification of violence, substance abuse, and unprotected sex, it seemed an unlikely place to hear messages promoting responsibility. However, AIDS in the United States is more concentrated in poor urban areas, particularly among African Americans, making it an important concern to the primary audience of hip-hop. Moreover, whereas other types of music weaved hints of ideas into otherwise normal songs,

rap lyrics were anything but subtle. The plain nature of its spoken word format allowed artists to discuss condom use and the Three Month Rule (or, as the hip-hop community called it, “The Nine-O”) in no uncertain terms.

On the day his version of *Slow Down* was released, Kanye West changed his Twitter icon to a red AIDS ribbon. Then, for a solid month thereafter, he broadcast information about how the disease has disproportionately affected the black community to his 8 million followers.

Illustration: Tweets from Kanye West<sup>104</sup>



At the end of the month, West released *Don't Care*, a song in which he talked about the dangers of unprotected sex and intravenous drug use:

*You get high / to get by / don't care if the needle's dirty  
Smoke crack / 'n' bareback / don't care if you die by  
thirty*

*Don't Care* also addressed the “down low,” a young and predominantly black underground subculture that arose

from the fact that black men who have sex with men (MSM) were far more likely not to think of themselves as gay or bisexual and to hide homosexual activity from female partners.<sup>105</sup>

At the time, young black MSM were more likely than any other race or age group to contract HIV, and were also the least likely to be aware of their infection.<sup>106</sup> Fueled by a CDC report that a third of young urban black MSM had HIV, but 90 percent of them didn't know it,<sup>107</sup> the secretive lifestyle was controversially blamed for the extremely high HIV rates among black women who did not know of their partners' homosexual activity.<sup>108</sup>

West, who publicly supported his openly gay cousin<sup>109</sup> and had bravely risked career suicide by criticizing the rap community for being too homophobic,<sup>110</sup> did so again by discussing gay issues in a hardcore rap song:

*Down low you / like the dudes / we don't care none  
Stop creepin' / stop sneakin' / come out in the sun  
Get loud 'n' / get proud / go have yo' fun  
Over half / do the math / you got to be safe, son  
A d-ck'll / kill ya quick / as a double barrel shotgun*

Fellow rapper Eminem took a distinctly different approach with *Go Kill Yourself*, an abrasive social critique that tackled a wide variety of self-destructive behavior, including drug abuse, gang violence, reckless driving, and even overeating.

For this song, Eminem and frequent collaborator Dr. Dre reprised their roles from their 1999 song *Guilty Conscience*, a modern morality play in which the two rappers portrayed the aspects of good and evil in a person's mind while making a decision. In *Guilty Conscience*,

Eminem's character, Slim Shady, encouraged one man to rob a liquor store, another to rape an underage girl, and another to murder a cheating wife and her lover, while Dre acted as the voice of reason.<sup>111</sup>

In *Go Kill Yourself*, Shady turns his malice toward people who do things they know are bad for them, cheering them on as they endanger their own lives:

*Don't slow down, muthaf-ckin' speed up (yeah)  
I'mma pop some corn and watch with my feet up  
You on the news (ha ha) turn that f-ckin' TV up  
What they scraped off the street won't fill a f-ckin'  
teacup*

...

*DD: Stop frontin' like you better than everybody else  
MM: Nah, keep doin' what you're doin' 'n' go kill  
yourself*

At one point, the song warns of the dangers of assuming that sexual partners tell the truth or that they are free of disease because they appear healthy:

*What's that AIDS? Naw, it's just a cough  
Now get your a-- over here and get me off  
I'm straight, white, and twenty b-tch, I don't got AIDS  
DD: Hate to break it to you honey but ya just got  
played*

The song specifically mentions the Three Month Rule twice, once when Eminem used a campy, effeminate tone to talk about casual homosexual sex in bathhouses:

*Mmm look at that man / he's hot for me  
F-ck the Three Month Rule / that's not for me  
Ooh I like that / come here my little buttercup  
Ours bodies are beautiful / why would we want to  
cover up*

As well as in a bridge by Dr. Dre:

*F-ck the po-po / the five-o  
 Got to go fo' / the nine-o  
 If you don't slow / down yo' roll  
 It's the end o' / yo' line bro*

...

*You keep doin' what you're doin' you gonna kill  
 yourself*

Eminem included just as many references to the movement in the accompanying music video as in the song itself, making frequent use of traffic signs as well as dressing both as Gaga and one of her skeleton backup dancers. The icing on the cake, however, was the album cover for the *Go Kill Yourself* single, which used the same holographic discs to create a direct parody of Gaga's album:

Illustration: Eminem's *Go Kill Yourself* album cover



Eminem already had a history of discussing unusual topics in his music. Whereas most rap songs talked about money, sex, crime, and street drugs, Eminem became the best-selling artist of the previous decade<sup>112</sup> rapping about his mother, prescription pain medication, and the challenges of being a single dad. Even so, *Go Kill Yourself* drew fire

from many groups who claimed it promoted discrimination and risky behavior, even suicide. Longtime friend Elton John<sup>113</sup> came to Eminem's defense in an interview, as he had several times before when the young rapper had been accused of homophobic lyrics:<sup>114</sup>

*Honestly I'd be surprised if anyone complaining has actually listened to the song. He says hateful words, yes, but he's playing a character, and just like his previous "feud" with Lady Gaga, the sentiment is hardly genuine.<sup>115</sup>*

*It's a bit of theatre to draw attention to some very hard truths and make certain people very angry. Which, as you can see, he has done quite remarkably. If this song makes someone mad enough to be more careful just to prove Eminem wrong, then I would say they've both come out ahead quite nicely, wouldn't you agree?*

## MOVING BEYOND MUSIC

Gaga's message and the Three Month Rule quickly spread beyond the music industry as celebrities of all kinds joined the movement. Professional athletes and actors alike recorded short videos supporting the cause and shared them on *SlowDownProject.com*, a concept which saw great success three years earlier at *ItGetsBetter.com*, a project aimed at preventing suicide among LGBT youth. Several of these videos were later adapted to 30-second spots and aired as PSAs on network television, but evidence of the movement appeared on the silver screen as well.

Independent filmmaker Tolomeo Costa won an Oscar for Best Documentary Feature at the 87th Annual Academy Awards for *Romeo*, a film about Andre Rymer, a promiscuous man who did not learn he had HIV until he was diagnosed with an advanced stage of AIDS. By going through his meticulously kept diary, Rymer compiled a list

of nearly a thousand Chicago-area women with whom he had sex, mostly unprotected, during the previous decade.

The film chronicles the aftermath of his indiscretions as he attempts to contact everyone he may have infected. While sifting through the shattered lives of his former lovers, Rymer visits dozens of sick women and grief-stricken families of those who had already died, as well as two children he did not know he had fathered. Rymer himself died painfully before he could complete the list, prompting the film crew to continue the grim task. Costa said he got the idea for the film from Faith Hill's song *Beautiful Stranger* as well as the story of Gaëtan Dugas (aka "Patient Zero"), the handsome flight attendant who allegedly jumpstarted the AIDS epidemic in the United States by sleeping with thousands of men across the country.<sup>116</sup>

On a lighter note, two mainstream romantic comedies with plots revolving around the Three Month Rule were box office hits that same year. *Waiting for Winifred* showed ladies' man Troy (Ryan Gosling) meeting his match in Winifred (Mila Kunis), who followed the Rule and challenged him to do the same. The movie followed Troy's misadventures as he narrowly overcame a string of temptations before finally winning over the woman of his dreams. *Ninety Days of Crazy* starred Mindy Kaling and James Franco as two friends who began dating and also chose to delay their physical relationship. Over the next few months, they got to know each other better without the complications of sex, fell in love, broke up, got back together, and ultimately decided to get married before ever sharing a bed.

Perhaps even more influential than their performances on-screen, though, was evidence of the movement in



celebrities' lives outside the studio. Several were spotted wearing "Keep Sex Beautiful" T-shirts, the product of a related campaign inspired by Gaga's words at her Los Angeles press conference. That paled in comparison, however, to how many wore gray silicone gel wristbands with "SLOW DOWN" stamped on them, similar to the white-and-red bands she designed in 2011 to raise funds for the victims of a major earthquake and tsunami in Japan.<sup>117</sup> For a time it became difficult to spot an athlete or entertainer who didn't sport one of these bands, which were obtained by attending a Lady Gaga concert or donating five dollars to the Slow Down Project.

Hollywood power couples also started following the waiting trend themselves. When one starlet was asked by a gossip magazine how her new boyfriend was in bed, she replied, "How would I know? We've only been together for two months. All I know now is that he is a very good kisser." Several celebrities went even further, publicly declaring their celibacy, just as Gaga had done in 2010.<sup>118</sup> Finding out that single musicians and actors weren't having sex was encouraging, particularly to young women. However, to young men, that was nothing compared to hearing the same message from the professional athletes they idolized.

After all, the history of American sports was paved by a long line of celebrated womanizers that stretched back to Babe Ruth,<sup>119</sup> with NBA legends like Wilt Chamberlain<sup>120</sup> and Magic Johnson<sup>121</sup> reportedly having several hundred different sexual partners a year in their heyday. This level of debauchery was to be expected in a sport where hordes of women threw themselves at athletes outside the stadium

after every game, some even following them around the country just for a chance to bed them.<sup>122</sup>

However, seeing these hyper-masculine modern-day gladiators lay down their swords, so to speak, was particularly influential to the group most at risk for HIV: young urban black men. Studies found that up to half of black basketball players at inner-city high schools believed they had a future in the NBA.<sup>123</sup> With the sport as fundamental to hip-hop culture as music, fans already attempted to emulate their heroes' larger-than-life personas by wearing their jerseys, making following in their footsteps of sexual restraint a welcome example of how the stars' influence could lead to positive changes.

The Three Month Rule eventually became safe to joke about and spread to the world of comedy as well. David Letterman presented the "Top Ten Things That Need a Three Month Rule" as a segment on his *Late Show*, and the topic became a staple for standup comedians. Below is an excerpt from Marshall Wright's 2015 HBO special, *Halfway Indecent*:

*Hey, remember when you could just meet a girl, and if she liked you, you could sleep with her? You know, way back when, like, oh, I don't know, f-cking three years ago?*

*I could strangle that Lady Gaga.*

*But seriously, I get it, and it's not her fault. It's my fault. Well, not just me, but people like me, and there's a lot of us. You know the type. The type of people who have penises.*

*Back before I looked like, you know, this, if I met some smokin' hottie on Tuesday, you think I told her I just hooked up with my skanky ex Monday night? Hell no.*

*These days, it doesn't matter. This whole "three month" thing is like the Brady Bill for vajayjay. Come on, three months? I can get a gun in ten days, but I have to wait ninety to get some nookie?*

*And everybody's doing it now. It's just like an amusement park. All the good rides have lines.*

*Except the wait is three freaking months and there's no one to talk to because you're the only one in line. Or you better be. Right? You better be.*

*The first month is OK, you're still getting to know each other, and the last month is like thirty Christmas Eves in a row, and you revert to your eight-year-old self, sittin' there in your pee-jays asking her, "Couldn't we open just one present?"*

*But that second month, whew, that's rough. You start looking around... Hey, are all the lines this long?*

*Trust me guys, wait it out. You do not want to shop around. Have you seen the rides with no lines? There is a reason, guys. Scary. No thank you, sir. I am not going in there. Might not make it out alive, you know?*

*It's just like airport security. It's a giant pain in the ass, and we don't want to go through it, but we sure as f-ck don't want to risk our lives with anyone else who didn't go through it.*

Perhaps the most obscure reference to the Three Month Rule from a public figure was made in 2015 by Justice Ruth Bader Ginsburg. In the Supreme Court's majority opinion about a decision that changed the way appeals from prisoners on death row are handled, she wrote:

*If society's general rule is to wait a minimum of three months before engaging in the sort of activity that can create a life, the least we can do is honor that same period before we, as a society, take a life.*

Writer Sheila Futrell called the wording a “defining moment for the Rule” in a *New York Times* opinion piece:

*When an octogenarian who has led the cloistered lifestyle of a Supreme Court Justice for over 20 years quotes an idea put forth by Lady Gaga, it is safe to say the Three Month Rule has graduated past a pop culture trend to become a permanent part of the fabric of our society.*

## THE BENEFITS OF SLOWING DOWN

She was right: The Rule had become part of our culture.

The best measure of the success of Gaga’s movement, though, isn’t a list of which celebrities helped popularize it. The best measure is not even the degree to which it achieved its intended purpose, i.e., preventing the spread of HIV. No, the best measure is the evidence that illustrates all the diverse ways our society, almost three decades later, has improved as a result of her effort.

## LESS CASUAL SEX

The behavioral change that can be attributed most directly to Gaga’s campaign is the decline of casual sex. Researchers noted that a migration toward the Three Month Rule, in both practice and public opinion, began in late 2012 – right after the Slow Down Project started – and continued to gain momentum before leveling off in 2022.

Of course, not everyone lives by the Rule, and those who do don’t always follow it to the letter. Today, the average time Americans wait before having sex with a new partner is closer to six weeks than three months, a monumental increase compared to 30 years ago. The Third Date Rule is

essentially extinct. To the generation reaching sexual maturity today, the older rule is a relic from a bygone era; they have only heard of the Three Month Rule.

This single shift in behavior has cascaded into a variety of other changes over the years, each with their own societal benefits.

To begin, delaying intimacy longer meant that shorter relationships, namely those that did not last past the waiting period, never resulted in sex. This had a pronounced impact on America's youth, where the movement first took hold. In 2009, a few years before the Three Month Rule was introduced, American high school students typically lost their virginity by their junior year,<sup>124</sup> and most waited less than three months to have sex for the first time.<sup>125</sup> But this has changed. Whereas the average age of first intercourse used to be 17,<sup>126</sup> by 2028 it had increased to 19.

Two years do not make a large difference later in life; 44-year-olds are essentially identical to 46-year-olds. However, 17 is a world apart from 19 in terms of maturity, personal growth, and responsibility. At 17, most Americans spend their days socializing with the same group of people with whom they grew up and, in most states, have only recently become eligible for a driver's license. By age 19, though, the vast majority have graduated from high school<sup>127</sup> and many have left the nest, gotten jobs, or gone to college. Sex has generally become a part of adult life, not adolescence.

This shift is most significant because having sex in high school was the societal norm just a few decades ago.<sup>128</sup> Now, losing one's virginity before graduation is no longer

an expected rite of passage. Today's teens report widespread social support for abstinence, which helps more of them to make decisions about sex based on their own values rather than peer pressure – and most are choosing to wait.<sup>129</sup>

With more people of all ages following the Three Month Rule, there are also fewer flings and one-night stands driving up each person's total number of sexual partners. Some things haven't changed – men still inflate their numbers while women still leave a few out<sup>130</sup> – but in 2038, all age groups reported, on average, nearly two fewer total lifetime sexual partners than similar groups did in 2008.

## LOWER STD RATES

The great news is that the fewer partners people have, the lower their chances of contracting and spreading sexually transmitted diseases. Each reduction of one partner doesn't just make those chances a little smaller, but exponentially smaller. And when everyone reduced those chances at the same time, the cumulative effect on disease was enormous.

Consider a world in which everyone has sex with only one person in their lifetime. In this scenario, sexually transmitted diseases have no way of spreading. On the other hand, if everyone has sex with eight different partners in their lifetime, and each of those has eight total partners themselves, and each of *those* has eight partners... the numbers add up quickly. People who have frequent casual sex and rack up tallies in the double or triple digits can be linked to millions of sources of infection.

Before the Three Month Rule, the number of new annual cases of HIV in America had remained constant for 20 years. However, when all those eights became sixes and the fives became threes across the country, the spread of HIV finally started tapering off.

More good news: Infection rates are down across the board. The Three Month Rule has helped thwart all STDs, particularly those that are curable and show symptoms earlier than HIV, like gonorrhea and syphilis. In fact, syphilis, which had been growing explosively among MSM after nearly being eliminated in the United States in 2000,<sup>131</sup> is now back to all-time lows and experts are again predicting its eventual eradication.<sup>132</sup>

Each notch eliminated from the bedpost avoids another source of new infection, but that is only part of the story. Following the Three Month Rule still helps prevent the spread of disease, even when couples eventually do have sex. This is because waiting lengthens the window during which prospective partners can discuss their sexual relationship before beginning it, which has several positive side effects.

For instance, waiting improves STD testing. People get tested more often today than they did 30 years ago, but more important than the frequency is the timing. Now that people expect a delay before having sex, getting tested and sharing the results has become a normal thing to do during the wait. Consequently, the number of people who get tested (and wait for the results) before having sex with a new partner has risen significantly.

This is important because testing is finally being used as a preventive measure. Over the past 30 years, getting tested

for STDs has become something people frequently do before having sex with a new partner rather than only after a scare from risky behavior. This shift in perception has taken the stigma out of getting tested. What used to be embarrassing is now just a regular part of a responsible lifestyle. Young people today share almost every detail of their lives with their social networks, and they hesitate no more to use Foursquare<sup>133</sup> to publicly check in at a testing center than they would at a restaurant. Even for those who don't get tested, waiting still helps by making it more likely that prior infections will make themselves known through symptoms, prompting treatment before the carrier unknowingly spreads it to a new partner.

Another effect waiting had on testing was that it spurred innovation in the medical industry. As one financial analyst correctly predicted in 2014:

*The Three Month Rule is effectively a global sex embargo. This will increase demand for better testing procedures, particularly among those who are willing to pay a premium to try to convince someone not to wait the full three months.*

Gaga modeled the Rule after CDC testing guidelines, which were based on the most common type of HIV testing at the time: antibody tests.<sup>134</sup> However, other testing methods were available, even back then. Nucleic acid-based tests, for example, could detect HIV in just over a week after infection, much earlier than antibody tests,<sup>135</sup> but they were much more expensive. To stretch their dollars, blood banks would screen donations by mixing samples from several people to perform a nucleic acid test on the batch,<sup>136</sup> but the method was prohibitively expensive for most individuals.<sup>137</sup> Since then, competition and advances in



technology have driven down the price of this faster method, and it has already overtaken antibody testing in the United States and Europe.

## **LOWER UNINTENDED PREGNANCY RATES**

Another benefit of waiting is that it gives couples more time to discuss contraception. Research has shown that the more non-sexual dating activities teenagers engage in, the more likely they are to discuss birth control before having sex<sup>138</sup> and use it consistently thereafter.<sup>139</sup> Furthermore, research has also shown that those who wait longer to begin having sex are also more likely to use contraception.<sup>140</sup>

This has had a dramatic effect on lowering pregnancy rates, particularly among teens. After all, teens who are sexually active but do not use birth control have about a 90 percent chance of becoming pregnant within a year.<sup>141</sup> The level of condom use among American teens, which had backslid in the early 2000s,<sup>142</sup> is now much higher, and overall contraceptive use is similar to that of European teens. As would be expected, so is the rate of teen pregnancy.<sup>143</sup>

As unintended pregnancies were avoided, so were the consequences that came with them, like miscarriage, adoption, or keeping unplanned children, each of which could have harmful effects on women and their families.<sup>144</sup> This says nothing, of course, of the most controversial outcome: abortion. Fortunately, abortion rates in America have plummeted even farther than pregnancy rates,<sup>145</sup> and are now among the lowest in the world.

Many still believe that a single terminated pregnancy is one too many, but even hardline abortion opponents have celebrated this improvement. While the pro-life/pro-choice debate raged on at an impasse, the Three Month Rule quietly made progress with the solution both sides agree is best: avoiding unintended pregnancies in the first place.

## LADY GAGA, CRIME FIGHTER

So how did Lady Gaga end up fighting crime?

In 2001, two economists published research that noted how crime began to fall in America 18 years after *Roe v. Wade*, and even earlier in the five states that allowed abortion before the landmark decision. In addition, states with higher abortion rates subsequently experienced higher drops in crime. By their calculations, the economists estimated that legalized abortion was responsible for as much as half of the reduction in crime in the 1990s.<sup>146</sup> This research gained new attention a few years later when one of the economists co-authored the bestseller *Freakonomics*, which devoted an entire chapter to explaining the recent drop in crime.<sup>147</sup> The concept was a new twist on the old idea<sup>148</sup> that unplanned children are more likely to grow up in unfavorable conditions and become delinquents.

Liberals have used the study to support abortion rights, while conservatives<sup>149</sup> have tried to discredit it, attributing the lower crime rates to other factors instead, such as the death penalty and changes in law enforcement,<sup>150</sup> or even the elimination of lead from paint and gasoline.<sup>151</sup> As is so often the case, the truth appears to be somewhere in the middle.

Starting in 2029, crime in America started another sustained dive, the shape and length of which almost perfectly parallels the decline in unintended births that began 16 years earlier. If the connection between crime and unwanted children were as powerful as the two economists theorized, the drop should have been twice as large, but to this day, academics have a hard time attributing the shift to anything but Gaga's movement.

## **THE BIRTH RATE PARADOX**

Surprisingly, despite this decline in overall pregnancy, the birth rate in America is actually higher now than it was before the Slow Down Project. However, this apparent paradox is easily explained.

Over the years, the Three Month Rule helped prevent millions of unintended pregnancies, but along the way, an interesting thing happened. For every ten women who avoided becoming pregnant accidentally, about eight others decided to become pregnant on purpose. On the surface, this would appear to be a net decrease, but between abortion and miscarriages, less than half of those unintended pregnancies would have resulted in a birth anyway.<sup>152</sup> On the other hand, the vast majority of women who get pregnant on purpose end up giving birth, which shows how we gained a net increase in children despite a lower overall pregnancy rate.<sup>153</sup>

Before the Slow Down Project, half of all pregnancies in the United States were accidental.<sup>154</sup> Today, two-thirds are planned, making America's intended pregnancy ratio and fertility rate the envy of the modern world,<sup>155</sup> in which many industrialized countries are shrinking.<sup>156</sup> Not too

long ago, though, the nation's population statistics weren't looking so healthy.

Birth rates in America had sustained several steady declines since the 1950s,<sup>157</sup> to the point where experts worried about having enough young people to keep the economy going with a large elderly population straining Medicare and Social Security.<sup>158</sup> In fact, Americans had only produced enough offspring to maintain a constant population in two of the 30 years between 1971 and 2011. The rest of the time, only immigration kept the country from shrinking.<sup>159</sup>

Right before the Three Month Rule was introduced, the birth rate was still dropping.<sup>160</sup> Then along came Gaga telling everyone to slow down, which demographers warned would mean disaster for the long-term future of the country. They needn't have worried, because around the same time, the country also saw a surge in marriage. More married people means more children: Married women get pregnant more often than single women and when they do, they are almost ten times as likely to have a child than an abortion.<sup>161</sup>

However, people didn't just start getting married more often. They also started marrying younger, staying together longer, having sex more frequently, and divorcing less frequently, and every one of these trends took a sharp turn right after the Slow Down Project.

Society had long been moving away from marriage and the traditional nuclear family.<sup>162</sup> What happened? Did Lady Gaga somehow convince people to get married and have babies? According to the experts, the answer is yes.

## LADY APHRODITE

Therapists explain this phenomenon by pointing out that the Three Month Rule gives couples the time to form bonds and establish communication within a relationship before adding the complications of sex, leading to stronger relationships. Social psychologists, on the other hand, claim that delaying gratification fosters an array of mature interpersonal habits and ultimately makes people appreciate their partners more.

Behavioral economists have yet another, less romantic explanation. According to their theories, people haven't changed at all – only the “market” has. The waiting period has increased the transaction cost for finding a new partner. As emotional consumers, we are keenly aware of this price hike, so we are now more selective when evaluating prospective mates and therefore make better decisions.<sup>163</sup>

Conventional wisdom, however, doesn't need a doctoral dissertation to know that the best things in life are worth waiting for. Or that when we put more work into something, we value it more. Or even that getting to know someone before having sex just might lead to a more successful relationship.

Whatever the reasons actually are, they have worked. And the generations who have grown up with the Three Month Rule have reaped the largest rewards. As stated earlier, 30 years ago most American high school students rushed into sex. However, they weren't happy about it. In 2010, most young people who had sex before the age of 20 wished they had waited longer.<sup>164</sup>

Compare that to today, when young people choose to become sexually active much later. Most remain virgins throughout high school, and almost four in ten wait until their twenties. When they finally do have sex, it is typically with someone they have been dating for several months, if not longer.

Delaying intercourse has solved many problems for young people. The regret is almost gone. In a recent survey, fewer than one in five said they wished they had waited longer.<sup>165</sup> Their first sexual experiences are better,<sup>166</sup> and because they are safer when they finally do have sex,<sup>167</sup> they also suffer fewer adverse consequences. Instead of rushing to have sex right away, they make sex part of a committed romantic relationship, which is more satisfying, both physically and emotionally.<sup>168</sup>

An entire generation rediscovered the simple joy of sharing sex only with partners they had gotten to know well before jumping into bed. The Three Month Rule ultimately heralded a wave of more successful relationships and more positive attitudes toward sex, which in turn has led to what may be the most counterintuitive change yet.

## **SLOW DOWN: SEX AHEAD**

Gaga may have told us to slow down, but we're having more sex than ever.

Contrary to how single life is glamorized in movies and TV shows, research has long shown that married people have more sex<sup>169</sup> and more satisfying sex<sup>170</sup> than their single counterparts. Married people are also happier in general,<sup>171</sup> although, as with most relationships observed in research, the direction of causality is not clear. In other words, this

could mean that marriage makes people happier, or that happy people get and stay married, or a bit of both.<sup>172</sup>

A satisfying love life is one of the top predictors of happiness,<sup>173</sup> and people have indeed become markedly happier recently. But the smiles on their faces are not just from spending more time in the bedroom. Some have joked that the government added anti-depressants to the water supply, but the reality is that almost any way you slice the data, Americans are better off today than they were 30 years ago.

The Slow Down Project convinced us to become a little more responsible. This caused several predictable effects, like lower rates of disease and abortion, as well as some that were harder to foresee, such as people having more sex and committing less crime. However, each of these outcomes were just the first dominos in longer chains of other improvements.

For example, convincing teens to wait longer before having sex led to fewer of them becoming pregnant. This, in turn, improved the declining high school graduation rate,<sup>174</sup> since teen pregnancy was one of the top reasons people quit without a diploma.<sup>175</sup> Dropouts use welfare and public health services more than others and also have higher rates of drug abuse and crime,<sup>176</sup> so reducing their numbers also reduced their staggering drain on society.

Beyond that, teens who abstain do better in high school than their sexually active classmates (even when not counting those who become pregnant) and are twice as likely to complete college.<sup>177</sup> A degree translates into greater lifetime earnings<sup>178</sup> and all the advantages that

come with them, such as better health (both of the individual as well as the entire economy).

For people of all ages, waiting led to more stable romantic partnerships, which has been linked to lower levels of depression, substance abuse, and domestic violence. And more of those relationships resulted in marriage, which is associated with lower health risks, longer life expectancy, and larger salaries, even for the same jobs.<sup>179</sup>

All of these changes are interrelated in a web too complex to untangle, making it impossible to attribute everything to Lady Gaga. Nevertheless, they have all improved recently and, most significantly, they all began improving at about the same time: shortly after the Slow Down Project. It is also not just an American phenomenon; all other developed nations have seen similar trends over the same period. The only unifying factor is a shift toward more responsible sexual behavior, which all started with the Three Month Rule.

Thirty years ago, one woman asked us to slow down and exercise a little self-restraint. Today, we are happier and healthier for it. Marriage and relationship satisfaction are up, crime and disease are down, and these numbers just keep getting better.

Thanks to Lady Gaga, our future looks bright.



## AFTERWORD: WHY IT WORKED

After the Slow Down Project, life improved in so many ways that it almost seemed too good to be true. That anyone could convince people to become more sexually responsible was hard enough to believe, but that the one to do so would be a young pop singer with a penchant for outlandish outfits was downright surreal. To top it off, the extent to which her work ultimately affected American society, and the world, was nearly incomprehensible. It was an incredible feat to be sure, but in retrospect the reasons that Gaga's efforts made such an impact are actually quite simple.

After years of failed strategies, sexual education was in desperate need of a new message. Gaga provided one in the form of an empowering movement, which she made successful by using her considerable influence as a media superstar. This movement convinced many people to change their habits a little, and all those small changes added up to make much larger differences, particularly when it came to HIV. The remainder of the book discusses each of these reasons in detail.

### REASON #1: SEX ED NEEDED A NEW MESSAGE

The history of sex education in America is filled with propaganda and misinformation. At almost every turn, well-intentioned people used colorful rhetoric to dramatically overstate the dangers of sex. John Todd's *Student's Manual*, first published in 1835, told young men that masturbation could drive them insane or cause sudden death. The topic was so distasteful that the author

said he could not write about it in English, so he switched to Latin instead.<sup>180</sup>

Later, the 1914 silent film *Damaged Goods* told the story of a young lawyer who contracts syphilis from a prostitute the night before his wedding. Afterward, he passes it on to his wife and unborn baby and then, distraught with grief, drowns himself.<sup>181</sup>

With the amount of media available today, it is difficult to appreciate how influential a single film could be, but this one shaped the perceptions of an entire generation. *Damaged Goods* made millions, inspiring copycats to make similar films for years thereafter, and the play upon which the film was based was hailed as “unquestionably the most widely discussed play of a decade” and “the greatest contribution ever made by the stage to the cause of humanity.”<sup>182</sup>

Sex education eventually became more reasonable than these early examples, but it was still fundamentally flawed. Before the Slow Down Project, it consisted of two distinctly different messages: “Safe Sex” and “Abstinence-Only.”

The Safe Sex message was born in the 1980s, a reaction to the new threat of AIDS. The original idea, boiled down, was:

*Sex can cause pregnancy and STDs. Condoms are the only contraceptive that can prevent disease, but are not 100% reliable. A second method of birth control is recommended.*

Safe Sex, which was later rebranded as comprehensive sex education, was usually delivered with other information

about STDs, the dangers of teen pregnancy, and how to resist peer pressure.<sup>183</sup>

The basic tenets of the other message, Abstinence-Only (or Abstinence-Only-Until-Marriage), had existed in religion for thousands of years, but only rose to prominence in public education after 1996, when the federal government began funding Abstinence-Only programs.<sup>184</sup> The main idea was:

*Sex outside marriage is wrong and harmful. Abstinence is the only certain way to avoid pregnancy and STDs. People should not have sex until they are married and supporting themselves.*<sup>185</sup>

Schools who took funding for Abstinence-Only programs had to follow very strict guidelines and were forbidden to even discuss contraceptive methods except to emphasize their failure rates.<sup>186</sup> This meant that in the early 2000s, American students received one of these two very different messages.<sup>187</sup> In theory, either strategy would have worked; unfortunately, neither was good enough in practice.

## **NO SUCH THING AS SAFE SEX**

The simplest form of the argument for Safe Sex was:

*No matter how much we discourage teens from having sex, some will have sex anyway. Therefore, for their own good, we should teach them how to do it as safely as possible.*

This approach was strongly supported by the scientific community, which reasoned that it would benefit the greatest number, since most teens do indeed have sex<sup>188</sup> and almost no one waits for marriage.<sup>189</sup>

However, the weaknesses of Safe Sex lay in its origin. It was, at its heart, a utilitarian reaction to a public health crisis. As a result, the approach measured its goals of disease and pregnancy prevention in cold, clinical terms, placing less importance on the overall well-being of the individual, such as the emotional impact on young people who have sex before they are ready.

It also exaggerated certain dangers, while not emphasizing others enough.<sup>190</sup> In a 2005 study of fears among students, AIDS was reported as the top fear by a wide margin among youths between the ages of 11 and 14,<sup>191</sup> despite there being only a .0003 percent likelihood of them catching HIV that year, based on their age.<sup>192</sup> AIDS was also the top fear among high school students, consuming attention which could have been spent on far more likely dangers. Meanwhile, things they should have been more worried about – like getting in a car accident, taking dangerous drugs, or getting pregnant – didn't even make the list of their top ten fears.<sup>193</sup>

Worst of all, the Safe Sex approach gave many young people a false sense of confidence. Programs taught students that proper condom usage nearly eliminates the risk of HIV, which is true.<sup>194</sup> They also taught that condoms are 97 percent effective against pregnancy.<sup>195</sup> This is also true: On average, over a 12-month period, fewer than 3 percent of women using condoms properly will become pregnant. However, in their zeal to promote condom usage, they failed to mention that, in practice, people often do not use them correctly and consistently enough to gain these benefits.

For preventing pregnancy, condoms actually have a yearly failure rate of 15 percent in the United States. Among

teenage females who live with their boyfriends, that failure rate is a whopping 47 percent.<sup>196</sup> This should not have been surprising, considering that essentially all Safe Sex programs talked about condoms, but only half demonstrated how to use them.<sup>197</sup> This helps explain why, in one major poll, eight in ten teens said they knew everything they needed to avoid an unplanned pregnancy, yet half said they knew nothing or little about how to use condoms.<sup>198</sup>

Making matters worse, condom usage peaked among students in tenth grade, then dropped significantly with each passing year in high school.<sup>199</sup> This change could be attributed to a nearly parallel increase in other birth control methods between those grade levels.<sup>200</sup> Regrettably, despite recommendations to use multiple methods of birth control and to always use condoms to help prevent STDs, when people start using more effective birth control methods, they tend to stop using condoms.<sup>201</sup> This phenomenon leads to its own set of problems when one partner places undeserved trust in the other's claims of being monogamous or disease-free. Condoms, the only type of contraceptive that helps prevent STDs,<sup>202</sup> were the lynchpin of the Safe Sex strategy, but they were not getting the job done.

The scientific community nevertheless called Safe Sex a successful strategy, and technically it was. A very deep body of research found comprehensive sex education to be effective at delaying the start of intercourse, reducing the number of partners, increasing contraceptive use, reducing teen pregnancy, and reducing the spread of STDs.<sup>203</sup> Even a study requested by conservative lawmakers to expose the

weaknesses of comprehensive programs grudgingly found them to be generally effective.<sup>204</sup>

Similarly, some anti-drug campaigns have been “successful,” too, in that they measurably reduced drug-related activity. But it’s not as if all drug-related problems in America have been solved, and neither had the problems stemming from sex. One in four teenage girls had an STD,<sup>205</sup> and America had the highest level of teen pregnancy in the developed world.<sup>206</sup> This is not the kind of “success” we needed.

## **ABSTINENCE-ONLY-IN-THEORY**

Social conservatives looked at those statistics and thought they could do better. To examine their philosophy, it needs to be split into two separate ideas: “abstinence” and “Abstinence-Only.”

The argument for abstinence:

*Sex can cause pregnancy and STDs. Only abstinence is guaranteed to prevent both. Therefore, for their own good, we should encourage teens to be abstinent.*

Abstinence-Only added the following ideas:

*Sex outside marriage is wrong and dangerous. Furthermore, we should not teach teens about contraceptives, since that would encourage them to have sex.*

In theory, Abstinence-Only is even better than Safe Sex. First of all, supporters were right: There is no such thing as “safe sex.” Every method of birth control short of a total hysterectomy has a chance of failure, and condoms, while very effective against disease when used perfectly every time,<sup>207</sup> have an alarming failure rate in practice.<sup>208</sup>

Furthermore, Abstinence-Only focused more on the overall well-being of the individual, including emotional health, not just what could be measured in a blood sample. Proponents argued that having sex too soon led to regret and guilt, and they were right again.<sup>209</sup> They also knew that awareness did not magically solve all problems. Even with education, adolescents often feel invulnerable, misjudge the riskiness of their sexual behavior, and make poor choices.<sup>210</sup>

Abstinence-Only advocates felt that Safe Sex was an inappropriate strategy for young people, who still need more guidance. To them, encouraging abstinence and all of its associated benefits was a better solution.

It could have been. Promoting abstinence could have been successful. The scientific evidence supporting abstinence itself was solid. It was the “-Only” part that was the problem.

First, it taught that having sex before marriage is wrong, an idea with which few Americans agreed anymore.<sup>211</sup> This watered down what could have been an effective message by presenting an unpopular opinion as a fact, which led students to question the rest of the strategy.

However, the fatal flaw behind Abstinence-Only was that it avoided teaching about contraceptives on the mistaken belief that doing so would encourage students to have sex. Many adults thought it would, but young people did not agree.<sup>212</sup> More importantly, overwhelming evidence showed that Safe Sex education did not make students any more likely to have sex. In a study of 32 comprehensive programs, not one sped up the initiation of sex; in fact, about half of them delayed it.<sup>213</sup> This meant that, with the

best of intentions, Abstinence-Only withheld vital information about protective practices from young people, most of whom were sexually active before they left high school.<sup>214</sup>

Even this drawback could have been offset if Abstinence-Only programs persuaded enough young people to be abstinent. Unfortunately, they didn't.

Studies showing that Abstinence-Only had any effect at all on behavior were few and far between,<sup>215</sup> and most of them ignored the most rudimentary principles of scientific research.<sup>216</sup> One report initially claimed that an Abstinence-Only approach could reduce sexual activity by as much as 80 percent among eighth-graders.<sup>217</sup> Later, more rigorous research showed it had only a short-term effect on attitudes and no effect on behavior,<sup>218</sup> yet the first study was still widely cited by Abstinence-Only advocates years after it had been debunked.

It's not as though Safe Sex programs were perfect; several had already been found to be equally ineffective.<sup>219</sup> On the other hand, mountains of evidence argued that Abstinence-Only made no impact whatsoever on behavior, and since it came at the expense of comprehensive sex education, was actually harmful.<sup>220</sup> A study of 13 different Abstinence-Only programs found them to have no effect on sexual initiation, unprotected sex, number of partners, or condom use.<sup>221</sup> Another studied 56 programs, eight of which were abstinence-based, and came to similar conclusions.<sup>222</sup>

With all this research finding "no impact," a detail often overlooked is that the principles behind Abstinence-Only did, in fact, persuade millions of people to abstain. The underlying ideas had been around for thousands of years



and were promoted by parents and religious leaders, who convinced many people to follow them. In 2010, when abstinent teens were asked why they had not yet had sex, the most popular answer was that doing so would be against their religion or morals.<sup>223</sup>

One of the main reasons Abstinence-Only education didn't have a measurable effect is that its values had already been accepted by the people most receptive to the message before Abstinence-Only programs entered the picture. Such programs made no impact because many people already followed the Abstinence-Only approach and the rest merely remained unpersuaded to join them.<sup>224</sup>

Abstinence worked. But Abstinence-Only education did not.

As a result, it was almost universally denounced by the scientific community. The American Medical Association,<sup>225</sup> American Psychological Association,<sup>226</sup> and a host of other professional organizations<sup>227</sup> opposed Abstinence-Only. When Congress requested a scientific evaluation of the Abstinence-Only programs it was funding, even the ones handpicked for quality were found to have no effect on abstinence.<sup>228</sup>

At first, every state except California took federal funding for Abstinence-Only programs.<sup>229</sup> However, as more strings were attached and the effectiveness of the approach was questioned, half of them later turned the money down.<sup>230</sup> Even conservative states came to negative conclusions through their own independent analyses. In 2004, the Kansas Department of Health found “no changes noted for participants’ actual or intended behavior.”<sup>231</sup> The next year, a Texas Department of State Health Services

report also found no effect, and the director of the study said: “These programs seem to be much more concerned about politics than kids.”<sup>232</sup>

## MUDSLINGING AND CHERRY-PICKING

He may have touched upon the primary reason for the widespread failure of Abstinence-Only education: Its principles were not written by scientists, or even educators. They were written by politicians, who strictly codified what Abstinence-Only could and couldn't teach.<sup>233</sup>

Some of the ideas they forced educators to present were true, such as teaching that abstinence is the only certain way to avoid pregnancy and STDs.<sup>234</sup> Others were inaccurate, like teaching that our society thinks sex between unmarried people is wrong, when most think otherwise.<sup>235</sup> Still others were blatant falsehoods, like telling students that sex outside of marriage will probably cause psychological and physical damage.<sup>236</sup>

Other than these principles, standards were lax, and a cottage industry sprung up to take advantage of the \$1.5 billion in federal funds made available to any organization that adhered to the guidelines.<sup>237</sup> As a result, many Abstinence-Only programs were riddled with inaccuracies, spreading false information about contraceptives and presenting religious beliefs as fact.<sup>238</sup>

This fueled a hostile debate that pitted liberals against conservatives, scientists against church leaders. Safe Sex advocates pointed to research that showed their approach worked better, but detractors said that just reflected the scientific community's secular bias against religion. Abstinence-Only was based on Christian values, which supporters felt was appropriate considering that four out of

five Americans are Christian.<sup>239</sup> Opponents countered that religion had no place in public schools.

Both sides slung a lot of mud, and neither side knew much about the other. Conservatives denounced Safe Sex for ignoring their ideals. However, 95 percent of comprehensive programs promoted abstinence,<sup>240</sup> and students consistently reported that, despite being taught about contraceptives, the main message was that they should not have sex.<sup>241</sup> On the other hand, liberals argued that Abstinence-Only was wasted on teens who were already sexually active, but that wasn't true either.<sup>242</sup> Others went so far as to accuse Abstinence-Only of violating human rights for endangering sexually active young people by withholding information they could use to protect themselves.<sup>243</sup>

It's hard to blame anyone for being confused since both camps distorted information to match their narrative. When criticizing the opposing side's educational materials, they zeroed in on the worst examples. Conservatives complained that one program included explicit sex tips that went beyond the information young people needed to stay safe and crossed over into more adult themes. Some excerpts:<sup>244</sup>

*Showering together is a “green light” (no risk) activity.*

*Excuse (for not using a condom): “When I stop to put it on, I’ll lose my erection.”*

*Instructed Response: “Don’t worry, I’ll help you get it back.”*

*Most women need to have their clitoris (the arousal organ in their vulvas) touched, or indirectly [touched] in order to have an orgasm.”*

On the other hand, liberals condemned one Abstinence-Only video<sup>245</sup> aimed at middle school students for grossly exaggerating the dangers of sex:

*Every time you have sex, it's like pulling the trigger. The only difference is, in Russian Roulette, you only have one in six chances of getting killed.*

...

*[Boy] "What if I have sex before marriage?"*

*[Man] "Well, I guess you'll just have to be prepared to die. And you'll probably take with you your spouse and one or more of your children."*

However, neither of these examples are representative of typical Safe Sex or Abstinence-Only education. Opponents merely brought them up as scare tactics.

The chicanery got even worse when advocates from either camp cherry-picked a single study to support their worldview. Take, for example, the debate over the virginity pledge movement, which was popularized in 1993 by the Southern Baptist Church. One of the first major studies of virginity pledge programs found that participants delayed having sex, but when they did, they were less likely to get tested for STDs or use contraceptives.<sup>246</sup> Later, another national study found that those who took pledges had just as much premarital sex as everyone else.<sup>247</sup>

Others looked at the skyrocketing rates of oral and anal sex among teens<sup>248</sup> and blamed Abstinence-Only and the virginity pledge movement. Supporters of this theory said that, since those acts do not “count” as losing one’s virginity, young people had found other ways to satisfy their hormonal urges while adhering to a warped interpretation of the pledge.<sup>249</sup> One study found that pledgers were, in fact, substituting anal and oral sex for

traditional sex,<sup>250</sup> which the first research team later confirmed.<sup>251</sup> Another research team found that anal sex was rare among virgins, and that they were no more likely to have it after Abstinence-Only was introduced.<sup>252</sup>

Amidst all the reports that pledges were meaningless, a different study showed that while public pledges indeed did not affect behavior, pledges made in private did.<sup>253</sup> To top it off, a final study discovered that nearly all pledgers later denied ever having taken a pledge,<sup>254</sup> which called into question all previous research.

As it stood, people on both sides could choose studies from any point in time to back any opinion they wanted to support. At the end of the day, nobody changed their minds about anything, and the debate raged on.

Since neither Safe Sex nor Abstinence-Only solved the problems of pregnancy and disease,<sup>255</sup> which approach to support became largely a matter of ideology. Safe Sex looked at the entire population and accepted that many teens will inevitably have sex. Supporters called this practical; detractors called it defeatist. On the other hand, Abstinence-Only focused on the individual benefits of avoiding sex. Advocates said this promoted healthy values; opponents said it was dangerously delusional.

The American judicial system operates on the belief that it is better to let ten guilty go free than to punish one innocent person, a principle drawn from English law<sup>256</sup> that dates back to the Biblical story of Sodom and Gomorrah.<sup>257</sup> When choosing between Safe Sex and Abstinence-Only, a similar question arose: Should we help more people be a little safer, or should we steer the few we can convince to follow the only truly safe path?

Americans found themselves in a predicament: Nearly everyone thought teens should be told to be abstinent, at least throughout high school,<sup>258</sup> but Abstinence-Only education was not convincing them to do so. One educator summed up the feelings of many:

*We teach our kids ideals. We tell them not to do drugs, and most end up trying them, but I still want to teach them not to. We tell them not to have sex, and most of them try that too, but I don't just want to throw condoms at them.*

*I care about them, and I want what's best for them. This isn't about religion or my personal beliefs. I'm a science teacher and an atheist, and I know for a fact, from hard data, that most kids would be better off waiting.*

*Abstinence is an ideal, and maybe we can't reach it with everyone, but I can't look any parent in the eye and tell them that we shouldn't be promoting abstinence. We just have to figure out a better way to do it.*

*Just because the message isn't getting through doesn't mean we should give up. Look at something less controversial. We teach kids math, but low scores show that the message is not getting through. Nobody is saying we should stop teaching math. They are saying we should teach math better.*

But how could we teach abstinence better?

## **AN UNEXPECTED ALLY**

Many Abstinence-Only supporters felt animosity toward the scientific community. After all, every study with strict controls had found Abstinence-Only to have no effect or be harmful. Martha Kempner, spokeswoman for the Sexuality

Information and Education Council of the United States, said:

*Abstinence-only was an experiment and it failed.*<sup>259</sup>

Then, in 2010, a team of researchers at the University of Pennsylvania published a study that showed an abstinence-based approach to have a lasting, positive impact – the very first randomized, controlled study to do so – and the impact was substantial.<sup>260</sup>

The findings vindicated those who had felt all along that abstinence was the best route. Robert Rector, a research fellow at the Heritage Foundation who wrote the criteria for federal funding of abstinence programs, said:

*This takes away the main pillar of opposition to abstinence education...I've always known that abstinence programs have gotten a bad rap.*<sup>261</sup>

Conservatives across the country rejoiced, but the idea that teaching abstinence could work was not news to them. More importantly, due to its scientific quality, the study also got the attention of many who were strong supporters of the Safe Sex approach. Sarah Brown, CEO of the National Campaign to Prevent Teen and Unplanned Pregnancy, called it “game-changing” in an interview, and said:

*For the first time, there is strong evidence that an abstinence-only intervention can help very young teens delay sex.*<sup>262</sup>

Even James Wagoner, president of Advocates for Youth and a regular critic of research that supported Abstinence-Only, praised the new study. One news article said:

*Even Wagoner, who charges that studies by conservative groups like the Heritage Foundation advocating abstinence-only programs are akin to having “Santa Claus write something from the North Pole,” found the federal study compelling. “This is a legitimate study from a legitimate researcher,” he said. “So those of us who believe in legitimate research have to pay attention.”<sup>263</sup>*

Valerie Huber, executive director of the National Abstinence Education Association, reacted by calling on the government to reinstate Abstinence-Only funding:

*The current recommendation before Congress in the 2011 budget zeroes out abstinence education, and puts all the money into broader comprehensive education...I hope that either the White House amends their request or Congress acts upon this, reinstating abstinence education.<sup>264</sup>*

However, the situation wasn't that simple. Although the program in the University of Pennsylvania study was abstinence-based, it was far from the federal definition of Abstinence-Only education. In fact, it was specifically designed to test teaching abstinence in a more effective way than by following the guidelines written by politicians.<sup>265</sup>

What was so different about this program? Most significantly, it purposefully avoided morality, religion, and marriage. It did not teach that premarital sex is wrong. The program encouraged abstinence, but instead of insisting they wait until marriage, instructors told students to wait until they were ready.<sup>266</sup>

The program encouraged students to think for themselves, and to consider how their personal goals would be affected



by an unplanned pregnancy or an STD.<sup>267</sup> Also, although the program did not cover contraceptives, questions about them were answered with medically accurate information<sup>268</sup> and instructors were not forced to say they were ineffective.<sup>269</sup>

According to Sarah Brown:

*They simply said delay...Wait a bit. Sex is serious. It has risks. And we just recommend you wait until you're older.*<sup>270</sup>

David Wiley, president of the American School Health Association, said:

*That sends a message to people that you can do abstinence-only, but you need to be smart about it...It proves that when you do it the right way, using medically accurate information, you get better results.*<sup>271</sup>

For the first time, both Safe Sex and Abstinence-Only supporters could agree on an approach, but it didn't match any of the strategies they had supported in the past.

It was time for a new message.

## **ON THE SHOULDERS OF GIANTS**

Teaching about contraceptives hadn't helped enough. Teaching that sex before marriage is wrong hadn't helped at all. But as the University of Pennsylvania study showed, asking teens to think for themselves, and to wait a bit, worked remarkably well. And that is exactly what Gaga did when she sang, "slow down and think about it." However, the Three Month Rule could never have succeeded without the contributions of both major sex education efforts that came before it.

First, Safe Sex had already raised awareness of STDs and contraceptives, which provided the basis for the Rule. If Gaga had to communicate those ideas as well, the message would have been too complex to take hold. Second, the swing toward traditional conservative values that accompanied the Abstinence-Only movement helped remove the stigma<sup>272</sup> of virginity, transforming it into something to be prized, rather than ashamed of, even for teenage boys.

In 2007, a national survey found that most teens felt that boys were often told they should be having sex, and that girls were told that attracting boys and looking sexy was one of the most important things they could do.<sup>273</sup> Yet only two in ten said it was embarrassing for teens to admit they are virgins, and males answered almost identically to females. Their parents, products of a different era, didn't know how much things had changed – twice as many adults thought teens would be ashamed of their virginity.<sup>274</sup>

Without the foundation laid by Safe Sex and Abstinence-Only, Gaga's movement never would have gotten off the ground. Also, it's not as if either of these previous messages went away.

The age-old principles of Abstinence-Only-Until-Marriage are still promoted today by many groups, particularly religious organizations. Parents also promote this strategy to their children, which is most important because no school program can hold a candle to the impact of parental guidance.<sup>275</sup> This continues to be the driving force behind abstinence among young people, as teens today are still most likely to state that they have avoided sex for religious or moral reasons, just as they were in 2010.<sup>276</sup>

The ideas behind Safe Sex are also still promoted by several organizations, such as the Centers for Disease Control and Prevention and the World Health Organization. While they do communicate the benefits of abstinence, their primary objective is to maintain public health. They focus on educating people about contraception, which continues to help lower disease and pregnancy rates among sexually active young people.<sup>277</sup>

Neither Abstinence-Only nor Safe Sex was a silver bullet, but each helped in its own way with different segments of the population. Gaga's movement added a third message to the mix, one that came from a different angle without interfering with the other two strategies. Together, the combination was more persuasive than any single message would have been on its own.

## **SEX EDUCATION TODAY**

Each of these messages helps in different ways, which is why modern sex education uses a blend of all three. After further studies confirmed that abstinence-focused education can produce positive results, the government integrated the strategy into its guidelines for federally funded curricula.

Today, comprehensive sex education begins by teaching abstinence in the fifth and sixth grades.<sup>278</sup> This is the stage when it is the most effective<sup>279</sup> and the benefits far outweigh the drawbacks of withholding information about contraceptives. Programs are similar to the one in the University of Pennsylvania study in that they do not take a moralistic tone or disparage contraceptives. Instead, they teach about the emotional and physical risks of sex and use

scientifically accurate data to get students to visualize how those could negatively impact their lives.

Programs in the seventh and eighth grades are similar, but include more information about STDs. They focus on the diseases most commonly transmitted by oral sex, which has become increasingly reported as commonplace activity in middle schools – not just among students, but also on school grounds.<sup>280</sup> Whereas earlier generations viewed oral sex as more personal than intercourse,<sup>281</sup> young people in the 2010s treated it casually, seeing it as a step between kissing and sex that was appropriate for people who were not in love, or even dating for that matter. They were far more likely to engage in oral sex than vaginal sex, and when they did, they almost never used condoms.<sup>282</sup> To help combat this, students today are taught the Three Month Rule and that oral sex “counts” as sex. Although all sexual activity is heavily discouraged, students are also taught about *smarter.gov*, a website operated by the CDC that promotes abstinence, but also provides videos tailored to a young audience about how to obtain and use contraceptives. This way, the information is made available to the few who need it without diluting the message for the majority who do not.

After four years of building a solid foundation on abstinence, the curricula changes in the ninth grade to reflect the social environment of high school, where 14-year-olds try their hardest to emulate their 18-year-old schoolmates and sexual activity picks up sharply.<sup>283</sup> The impacts of teen pregnancy are discussed in depth. Students view and discuss episodes of *16 & Pregnant*, a reality television series produced by MTV that shows the hardships caused by unintended pregnancies in a

documentary format. The show is now in its 32nd season, but when it first aired in 2009, many parents worried that it glamorized teen pregnancy. However, teens overwhelmingly felt the show helped them better understand the challenges of pregnancy and parenthood.<sup>284</sup>

High school sex education teaches about multiple forms of birth control and is required to demonstrate how to use condoms, which helps prevent young people from becoming overconfident without actually knowing how to protect themselves.<sup>285</sup> Furthermore, Gaga’s message, the Three Month Rule, is now taught as the second step of safe sex practices, right after the first step: abstinence.

Previously, the “ABC” method was a safe sex teaching tool that became popular after being credited with lowering an entire country’s HIV rate.<sup>286</sup> It stated:

Illustration: ABC Method

- 
- A** **Abstinence**  
Do not have sex before marriage.
  - B** **Be Faithful**  
When you do have sex, practice monogamy.
  - C** **Condoms**  
Use condoms consistently and correctly.

Today, American schools teach the “AWAKE” method, which emphasizes waiting.<sup>287</sup> From fifth grade onward, the message is clear at every stage: It is a bad idea for students to have sex. However, trying to convince young people to act more responsibly works better when they are not just

educated about risks, but also taught how to make better decisions in general. Furthermore, while improving critical thinking skills helps them avoid danger, it also improves almost every aspect of their lives, including their academic performance.

Illustration: AWAKE Method



Practicing making difficult decisions helps prepare young people for greater challenges down the road.<sup>288</sup> For example, teens with more confidence and self-control are more likely to follow through on intentions to remain abstinent or follow safe sex practices.<sup>289</sup> Also, remaining abstinent does not only prevent disease and pregnancy, but is also associated with better grades, lower rates of drug and alcohol use, and even lower rates of depression.<sup>290</sup>

After further studies showed that a wide range of positive behaviors were all interrelated,<sup>291</sup> and also that more time had to be spent on abstinence-based education for it to be

effective,<sup>292</sup> sex education was expanded in a way that has redefined the role of the public school system.

In fact, we don't even call it "sex education" anymore. Abstinence and safe sex practices are now taught as part of a relatively new subject called "Comprehensive Life Skills for Success and Well-Being" (CLS). "Life skills," as it is most commonly known, is taught at all grade levels alongside other subjects like English, math, and history.

Life skills courses aim to improve students' physical and emotional health, as well as teach them to think critically and achieve goals. Just as with academic subjects, lessons are adapted to be developmentally appropriate. For example, younger students are taught the value of telling the truth, how to recognize bullying or abuse, and what to do if they get lost.<sup>293</sup> By the end of grade school, students learn basic first aid skills and how to make healthier eating choices, and starting in middle school, students learn strategies for avoiding drugs and alcohol.<sup>294</sup> Beyond just learning about contraception, high school seniors are prepared for adult life with lessons in how to apply for college, how to interview for a job, and even how to manage their finances, including basic information about taxes, mortgages, and credit cards.

When life skills was first introduced, liberal critics branded it as brainwashing, arguing that teaching morality had no place in public schools<sup>295</sup> and that doing so would steal already limited time and funding away from vital subjects. Educators answered that life skills courses only promote universally shared cultural values, like honesty and personal responsibility, that have been scientifically proven to lead to success. Although these values are also highly

prized by the religious community, life skills courses present them in a completely secular manner.

Conservatives pointed out that most private schools split time between academics and religious development<sup>296</sup> and still get better test scores.<sup>297</sup> They applauded the values taught in CLS, however they took issue with the sex education component, saying that teaching the Three Month Rule along with information about contraceptives gives teens tacit permission to have sex. Educators calmed their concerns by promising that parents would receive an overview of the course at the beginning of each year and could opt to remove their children from the portions with sexual content. They also assured them that after they saw how effective the classes were, they wouldn't want to exercise that option.

The results spoke for themselves. Pilot programs showed life skills courses contributed to overall academic performance and convinced more students to delay sex than any previous approach.<sup>298</sup> The sex education component also shared several characteristics with some of the only programs to gain support from both Safe Sex and Abstinence-Only advocates. For example, in 2009, North Carolina began a two-part program: The first portion stressed abstinence, the second taught about contraceptives, and parents could remove their children from either. The program got the support of Planned Parenthood as well as conservative groups. Reverend Mark Creech, executive director of the Christian Action League, called the program a good compromise, saying:

*When it became apparent that we weren't going to be able to succeed [in providing just abstinence-only*



*education], we shifted to try to preserve as much of the abstinence message as possible.<sup>299</sup>*

As a central tenet of modern sex education, the Three Month Rule was crucial to its widespread acceptance. Not everyone supported it: The extreme left found the Rule too restrictive and the far right thought it was too permissive. However, the vast majority saw it as a reasonable middle path that bridged the chasm between Abstinence-Only and Safe Sex without interfering with either. Pragmatic Abstinence-Only supporters knew that even though the Rule didn't ask people to wait until marriage, following it effectively meant abstinence for the characteristically short-lived relationships of young people. And Safe Sex advocates were happy to see STD and teen pregnancy rates drop, even if it meant promoting conservative values.

As life skills classes were rolled out across the country, grades shot up, pregnancy rates fell, and the debate simmered down. Today, every state accepts federal funds to teach life skills and requires CLS classes for general teaching certification. This means that sex education is no longer given the short shrift of an hour-long visit from the school nurse or a presentation from an outside group. Instead, abstinence and safe sex practices are always taught by experienced educators who know the students. Furthermore, they integrate the most important components of all three messages, Safe Sex, Abstinence-Only, and the Three Month Rule, into the most effective strategy for increasing sexual responsibility ever developed.

## REASON #2: THE MOVEMENT WAS EMPOWERING

Gaga started a cultural revolution. Throughout the 2010s, people around the world started waiting longer before having sex and became more selective about choosing sexual partners. They also started getting married earlier and staying married longer, changing our societal norms to what they are today.

However, it was not the first time the Western world underwent a rapid shift in sexual behavior and attitudes. Fifty years earlier, the 1960s saw a series of changes in the opposite direction. Birth control promised consequence-free sex.<sup>300</sup> Divorce rates doubled in a decade.<sup>301</sup> The concepts of sexual liberation and free love lifted the stigma from all manners of sexual activity occurring outside traditional, monogamous marriages. The Sixties ushered in an era of promiscuity, and by the end of the decade, divorce laws were relaxed<sup>302</sup> and marriage had begun a steady decline that lasted for 40 years.<sup>303</sup>

History has a habit of repeating itself, though, and eventually the pendulum swung back. In the 1960s, we had a revolution of sexual freedom. Later, in the 2010s, we had a revolution of sexual responsibility.

There were a remarkable number of similarities between the two movements. They both rejected societal norms about sexual behavior, they both first took hold in the youngest generation, and in both, the ideas were largely spread through music. Most significant, though, was that both caused real social change by empowering people.

Free love gave us the power to say “yes” to all manners of sex without suffering stiff social penalties. The Three

Month Rule, on the other hand, gave us a similar power to say “no.” (Or, at least, “Not right now.”)

## THE WORLDWIDE WAIT

The AIDS scare peaked at the midpoint between these two movements.<sup>304</sup> Then, public concern began to wane and progress against the disease in the United States screeched to a halt.<sup>305</sup> With the Slow Down Project, though, Gaga turned the world’s attention back to AIDS and began a new effort to combat it.

In her speech announcing the project, her final words were: “By working together, we will be the generation to beat AIDS.” By following the Three Month Rule, people weren’t just helping themselves; they became part of a worldwide effort to eradicate a deadly disease. This had an especially large impact on the group that AIDS affected the most in America: gay and bisexual men.<sup>306</sup>

Previous efforts to promote abstinence and monogamy had been inextricably tied to religion, which gave them little hope of persuading the gay community. It’s not as if gay men were not religious; in fact, 70 percent identified as Christian,<sup>307</sup> almost the same ratio as the nation as a whole.<sup>308</sup> Most other Christians didn’t know this, in part because they rarely saw gay men in church<sup>309</sup> and also because homosexuality is condemned in several books of the Bible.<sup>310</sup> Many gay Christians, however, focused exclusively on the words of Jesus, who never spoke of homosexuality<sup>311</sup> and taught that, speaking as the son of God, his simple rule of universal love superseded the rabbis and the mitzvat – the 613 commandments of ancient Jewish law<sup>312</sup> – a practice that led to his execution.<sup>313</sup> Fundamentalist Christians believed that the

Bible should be followed to the letter, but others argued that many of its ancient rules didn't apply to modern society, pointing out how only a few pages before calling homosexual sex "an abomination" in the Bible,<sup>314</sup> God says the very same thing about eating shellfish.<sup>315</sup>

The disagreement over what it meant to be a good Christian left a rift between the two groups. Whereas most Americans looked to religion to guide their decisions, the vast majority of the LGBT community did not,<sup>316</sup> and very few gay men attended church weekly.<sup>317</sup> This was not surprising, considering most churches frequently condemned homosexuality.<sup>318</sup> One fundamentalist "church" even spent hundreds of thousands of dollars per year to fly its members around the country to hold "GOD HATES FAGS" signs at high-profile events.<sup>319</sup>

At the end of the day, the divide was just too wide. Christianity promoted Abstinence-Only-Until-Marriage, but gay people couldn't even get married in all but a few states.<sup>320</sup> Extremists aside, an overwhelming number of mainstream religious people held negative views toward homosexuality.<sup>321</sup> Few thought that it was caused by genetics and most thought it was a choice,<sup>322</sup> leaving gay people to feel persecuted over something they felt they had no control over.<sup>323</sup>

This helps explain why *Born This Way* was so popular in the gay community. In fact, Elton John called the 2011 hit "the new gay anthem."<sup>324</sup> They may not have been listening to church sermons, but they were listening to someone: Lady Gaga.

However, they listened to her not just when she sang, but also when she spoke. She was a longtime proponent of gay

rights,<sup>325</sup> and many compared Gaga to Martin Luther King, Jr.: She waged a peaceful war to end discrimination against the LGBT community similar to how the civil rights icon had done so for the black community.<sup>326</sup> And after *Born This Way* rallied the troops, *Slow Down* gave them marching orders.

This was crucial to the fight against AIDS since the risk was so concentrated in the gay community. According to the CDC, men who had sex with men (MSM) were up to 86 times more likely than straight men to be diagnosed with HIV, and in a study of 21 major US cities, one in five MSM had HIV, but nearly half were unaware of it.<sup>327</sup> Compounding the problem, relatively few gay men were monogamous<sup>328</sup> and “barebacking,” i.e., abandoning condoms altogether, was a growing trend.<sup>329</sup> So when Gaga said to slow down, it was incredibly important that the gay community listened.

The Three Month Rule gave a new reason to be sexually responsible, one that had nothing to do with religion or morality. Furthermore, the reason was external. A man telling a prospective partner he wanted to wait was nothing personal; it was part of a broad effort to keep the gay community safe and beat the disease that had been decimating it. Some followed the Rule as a matter of gay pride, which caused others to follow it to avoid being ostracized as betrayers of their community, an important aspect of many gay men’s lives.<sup>330</sup> Still others followed it out of self-preservation: With so many gay men following the Rule, it was only logical to assume that the ones who ignored it were the riskiest potential partners. The exact reasons didn’t matter as much as the fact that so many

started following the Rule, waiting longer and getting tested before having sex with a new partner.

Even more important, and what made the Slow Down Project a success, was that it convinced enough people to change their behavior at the same time to make the differences stick. The triumph of the movement came when it seemed normal to follow the Rule. After all, even when we are alone, the decisions we make about our health are largely based on what we believe society expects from us.<sup>331</sup> However, when the movement was just getting started, certain pockets of the population led the charge, evangelizing the Rule because it was personally important to them.

Research on another abstinence campaign found that those who took virginity pledges felt that the decision to abstain became part of their identity, and furthermore that such movements were only effective when the right number of people took the pledge. If too few participated, pledgers lacked adequate social support; however, if too many participated, the pledge lost its meaning as a distinctive expression of their personality.<sup>332</sup>

This phenomenon had the largest impact among gay men, but it also played a similar role in other minority groups that were disproportionately affected by HIV.<sup>333</sup> Whether due to gay pride, black pride, or Latino pride, the Three Month Rule became a separate identity movement within each group, gathering together enough people to be sustainable. After it seemed that most people were following the Three Month Rule, dynamics similar to those observed in minority communities benefited another group of people who also bore an imbalanced portion of sexual consequences: women.

On top of bearing the risks of pregnancy, women are also the ones who typically end up taking care of unplanned children.<sup>334</sup> In addition, they are physiologically more susceptible to STDs than men are.<sup>335</sup> Yet men are the driving force behind the sexual aspect of most heterosexual relationships.<sup>336</sup> As such, they enjoy a variety of double standards that give them enormous freedom and power,<sup>337</sup> forcing women into the role of choosing between meeting a man's needs or restricting his pleasure.<sup>338</sup>

Before the Three Month Rule, this was a larger problem, especially for young women. There was a growing trend of extremely casual sex, particularly on college campuses.<sup>339</sup> Whether they called it "hooking up," having a "booty call," or being "friends with benefits," most college students had sex with people with whom they did not have a romantic relationship.<sup>340</sup> This suited men just fine, but it left women feeling used.<sup>341</sup> Women's sex drives are radically different than men's<sup>342</sup> and most women would prefer to establish a stronger emotional bond before having sex with a new partner, but many acquiesce just to keep prospective mates from looking elsewhere.<sup>343</sup> Despite the popular belief that hooking up was harmless, the practice often led to unwanted sex,<sup>344</sup> and even when these casual encounters were completely consensual, women frequently regretted them.<sup>345</sup>

This made young women very receptive to the Three Month Rule.<sup>346</sup> The arrival of a new reason to wait, especially one that couldn't be taken personally by men, was embraced by women of all ages who wanted to delay sex. But just as with the minority groups, what was most important was that so many women decided to follow the Rule at the same time.

Almost every aspect of human behavior can be described using economic terms, even sex. Economically speaking, since men generally want sex more than women do,<sup>347</sup> female sexuality has a greater value within heterosexual communities. This explains why, for example, female virginity has been historically prized, but male virginity has not.<sup>348</sup> As defined by societal gender roles in the market for mates, men are “buyers” and women are “sellers.” All typical laws of supply and demand apply. If only a few women had made sex scarcer by waiting longer (raising the price), men would have simply turned to more promiscuous (cheaper) competitors.

However, the widespread following of the Three Month Rule amounted to a “collusion among sellers.” More commonly known as price fixing, this practice requires sellers to cooperate and is one of the only ways around normal market pressures. It also leads to the common benefit of the sellers – women, in this case – which helps explain the movement’s sustainability.

Note that this could have backfired if Gaga had asked people to abstain instead of just wait. To see the unintended consequences of a rule that forbids a desirable activity, one needs look no further than the United States government’s attempt to legalize alcohol in 1920. The “Noble Experiment” utterly failed. Prohibition did not end the targeted behavior, it just drove it underground, making it more costly and dangerous<sup>349</sup> – which is precisely what happens when sex is banned.

Epidemiologists and economists alike have shown how, when a large portion of a population abstains, sexual activity becomes concentrated among the remaining population and disease spreads even faster, ultimately



hurting everyone, even those who abstain.<sup>350</sup> Another bleak possibility: Links have been observed between sexually repressed cultures, such as those in the Middle East, and violence.<sup>351</sup> The United States, already one of the most repressed<sup>352</sup> and the most violent<sup>353</sup> of the developed nations, could have been pushed in a dangerous direction. Fortunately, none of this happened. The Three Month Rule didn't make sex rare, it just raised the amount of investment required to get it, which in turn increased its perceived value for both men and women.<sup>354</sup>

Plenty of young men decided to live by the Rule of their own volition. Traditional gender roles dictated that males should seek sex at every opportunity, but not all men wanted to act this way.<sup>355</sup> The Three Month Rule eased this pressure, allowing males to approach a relationship slowly without being viewed as less masculine.

Nevertheless, young heterosexual men were the group least receptive to Gaga's message overall,<sup>356</sup> and when a new partner wanted to wait longer than they preferred, they often weighed their options. They could pursue another woman instead, but the movement was so widely accepted that, among comparable prospective mates, few pastures were greener. They could lower their standards, seeking out less desirable mates who might be more willing to break the Rule, but most decided that would be unsatisfying. They could also just pay for sex, but despite alarmist predictions, asking them to wait a few months was not enough to send droves of men into the arms of prostitutes. The vast majority came to the conclusion that the best option was simply to wait. (And perhaps to try to be such a good boyfriend that a woman might consider breaking the Rule a few weeks early.)

The Three Month Rule meant longer courtship, which women also enjoyed.<sup>357</sup> To some, waiting served as a trial by which a prospective mate could prove his worth and devotion, a modern spin on a romantic custom once thought lost. Flying in the face of social stereotypes, a man who followed the Rule was seen as having greater value, for both his self-control and safety. By comparison, one who ignored the Rule appeared to be immature and a bad risk.

Since so many women chose to follow the Rule at the same time, it gave them the collective bargaining power to delay sex without suffering social penalties or limiting their selection of mates. Normally, when sellers cooperate to manipulate the market, buyers are harmed. On the surface, it may appear that men, as the more reluctant participants in the movement, lost out. In reality, though, they were only temporarily inconvenienced, and in the long run they enjoyed all the same advantages that women did. Men benefited from lower disease and unplanned pregnancy rates too, but they also ended up getting more of what they wanted. As stated earlier, those who waited to have sex within an established, committed relationship tended to have more frequent and more satisfying sex. This experience created a positive feedback loop that has left more men than ever before seeking long-term partnerships instead of casual sex. As it turned out, waiting a little longer wasn't that bad after all.

## **MOVING THE STARS WITHIN REACH**

The Three Month Rule may have ended up working better, but it is not as if the ideas that came before were worthless. At first glance, Safe Sex and Abstinence-Only seem like very sensible approaches. After all, living by either strategy requires keeping only one simple commitment.<sup>358</sup> To get

the reasonably good protection of Safe Sex, one must follow through on this pledge:

*I will use a condom every time I have sex.*

On the other hand, Abstinence-Only offers ironclad safety when two people live up to this vow:

*I will not have sex outside of marriage.*

Both of these promises are admirable, but although they seem straightforward, in practice they are extremely difficult to keep. So difficult, in fact, that they make ineffective goals. To see why, we must examine in detail how goals work.

Personal goals are powerful. They guide our actions, motivate us, make us more persistent, and increase our chances of getting what we want in life. Many factors affect whether we achieve our goals, including their importance, their difficulty, our commitment, our confidence, the amount of feedback we receive, and the quality of the goal itself.<sup>359</sup>

Identifying a good personal goal is a complex process. They should be optimistic, but realistic. This does not mean they should be easy; on the contrary, they should seem challenging, just not impossible.<sup>360</sup> The best goals push the limits of our ability. The harder the goal, the harder we work... up to a point.<sup>361</sup>

The benefits of setting easy goals are small, but become larger as the goals become harder. It's best when they are challenging, but not too challenging, because goals stop helping us when they are too difficult.<sup>362</sup> Finding the sweet spot between these two extremes is critical to success,

because our behavior toward a goal depends largely on how difficult it appears to be.<sup>363</sup> Specifically, when goals seem impossible, we don't bother trying. When they are too easy, we don't take them seriously and ignore them as afterthoughts.<sup>364</sup>

In this regard, Safe Sex educators did students a disservice by portraying condoms as being so easy to use.<sup>365</sup> As a result, teens became overconfident. They promised themselves they would use condoms without even knowing how,<sup>366</sup> then, since it didn't seem difficult enough to worry about, moved their commitments to the backs of their minds.

Educators likened using a condom to wearing a seat belt, but presenting condoms as such a simple solution was dangerous because, in the heat of the moment, whether or not to use a condom is a far more complicated decision. By appearing too easy, the Safe Sex strategy gave a false sense of security and did not prompt a response that reflected the serious consequences of not following it perfectly. Just committing to use condoms was not an ideal goal because it did not challenge people enough to motivate them to put in the thought, planning, and effort required to actually follow through on their intentions.

Living by Abstinence-Only was also not an ideal goal, but for the opposite reason: It seemed too difficult. Part of this is due to the vague nature of any vow to wait until marriage. For us to control our behavior, goals need to be specific.<sup>367</sup> In this case, the course of action is clear, but the endpoint is unknown. For most Americans, until the invitations have been sent and some non-refundable deposits have been paid, people have no idea when, or even if, they will be married.

Furthermore, the institution of marriage itself was in decline. In 2011, the US Census reported that marriage was at an all-time low, with single adults recently outnumbering married adults, and those who were getting married were waiting longer than ever before.<sup>368</sup> Between the end of World War II and the 1970s, the median age of first marriage held constant, remaining between 20 and 21 for women and around 23 for men. After that, a variety of social and economic pressures encouraged people to delay marriage,<sup>369</sup> and these numbers raced upward.<sup>370</sup> By 2009, the median age of first marriage for both sexes was rapidly approaching 30, and showed no sign of stopping.<sup>371</sup>

This seemed like an awfully long time to wait for most teens, and with good reason. Humans use a different part of the brain when thinking about the near future versus the distant future,<sup>372</sup> especially when thinking about immediate rewards.<sup>373</sup> The longer we have to wait for a reward, the less valuable it is to us at the present moment,<sup>374</sup> to an exponential extent.<sup>375</sup> This makes it difficult for us to weigh what we want right now against our long-term goals.

Adolescents have an even harder time waiting because they view the future in shorter terms than adults. Young children can barely imagine next week, while adults can plan for events several years in the future. The brains of teenagers are somewhere in-between, and their concept of the future has not fully formed yet.<sup>376</sup>

To make matters worse, time seems to drag even more for people who are suppressing their natural urges.<sup>377</sup> Albert Einstein summed it up expertly:

*An hour sitting with a pretty girl on a park bench passes like a minute, but a minute sitting on a hot stove seems like an hour. That's relativity.<sup>378</sup>*

Add that to the fact that Americans were marrying later, or not at all, and waiting until marriage seemed like an eternity to teenagers. In fact, it was hard for them to even imagine waiting that long, and this was part of the problem. Visualizing ourselves taking an action is an important step toward actually following through,<sup>379</sup> but such mental simulations, although imaginary, are still based on reality.<sup>380</sup> And the reality was that virtually no one waited until marriage.

In 2002, 95 percent of Americans in their mid-forties said they had premarital sex. Furthermore, this was not a new trend. Despite wistful recollections from grandparents, those who thought the “good ol’ days” were much different were viewing the past through rose-tinted bifocals: Even among women born in the 1940s, about nine in ten had sex before marriage.<sup>381</sup>

In a country that was almost 80 percent Christian,<sup>382</sup> fewer than 5 percent lived up to the ideals of Abstinence-Only.<sup>383</sup> Even evangelicals knew this. In a *Christianity Today* article, sociologist Mark Regnerus wrote:

*...few evangelicals accomplish what their pastors and parents wanted them to ... when people wait until their mid-to-late 20s to marry, it is unreasonable to expect them to refrain from sex. It's battling our Creator's reproductive designs. The data don't lie.*

*...just under 80 percent of unmarried, church-going, conservative Protestants who are currently dating someone are having sex of some sort. I'm certainly not suggesting that they cannot abstain. I'm suggesting*

*that in the domain of sex, most of them don't and won't.*<sup>384</sup>

Yet marrying younger wasn't an ideal solution, either. Those who married before the age of 18 were twice as likely to get divorced within ten years as those who married at age 25 or older.<sup>385</sup>

Parents knew that young love often doesn't last and told their children not to rush into marriage, saying it could wait until after college or a career. But this made asking them to forgo sex until marriage that much harder. In fact, these parents had no idea just how difficult what they were asking their children to do was. To remain abstinent until marriage, people born in 1982 had to wait two to three times longer after high school than those born in 1953 did.<sup>386</sup> They meant well, but it was hypocritical to tell children to entrust their health and well-being to a strategy fewer than 5 percent of parents had been able to follow themselves.

Abstinence-Only was not an ideal goal because it placed a set of demands on young people that seemed impossible. No one should have been surprised when 14-year-old boys didn't follow through on their pledges to avoid sex until they were almost 30. After all, if adolescents could accurately plan their life decisions 15 years in advance, we'd have a nation of millionaire professional football players and marine biologists.<sup>387</sup>

## DROWNING IN LAKE WOBEGON

Always use a condom. Wait until marriage for sex. Why are these two simple goals so difficult to achieve? Because both require levels of self-control rarely found in humans.

Statistically speaking, you probably have not followed either of these rules perfectly in your own life. Furthermore, you probably think that you could have if you had really wanted to, or that your circumstances were uniquely challenging, or that you made your decisions for better reasons than most people. This is because you think you are better than other people. It's OK; we all think this way.<sup>388</sup>

Humans, particularly in Western cultures,<sup>389</sup> have startlingly high opinions of themselves. As one researcher put it:

*...most of us appear to believe that we are more athletic, intelligent, organized, ethical, logical, interesting, fair-minded, and healthy – not to mention more attractive – than the average person.<sup>390</sup>*

Our opinions of ourselves are even more inflated for qualities that are subjective and hard to measure.<sup>391</sup> Of course, we don't think we can perform surgery if we have not gone to medical school. But we do think we are better than most at everyday activities, like making decisions or judging a person's character.

When evaluating such skills in any group of people, half are above-average and half are below-average. Yet nearly everyone thinks they are in the top half. For example, we all know that some people lack social skills, yet in a survey of nearly a million people, fewer than 1 percent said they were below-average at getting along with others.<sup>392</sup>



We think about ourselves in very different ways than we think about other people. When we win a game, we credit our superior skill. When our opponent wins, however, we chalk the loss up to bad luck.<sup>393</sup> Similarly, when we do not live up to our promises, we forgive ourselves quickly: We make excuses, blaming others or factors outside our control,<sup>394</sup> and we give ourselves credit for our good intentions.<sup>395</sup> When others fail, on the other hand, it is obviously due to their personal flaws.<sup>396</sup>

We can easily see how everyone else deludes themselves into thinking they are better than most people. Yet even after learning exactly how these biases work, we still refuse to recognize that we think that way ourselves.<sup>397</sup> But we are all guilty of it. Consider this example: Imagine you are driving and you come to a four-way stop. When your turn comes up, you step on the gas only to find that another car has entered the intersection at the same time. As you slam on the brakes, what is your reaction? Do you get angry at this rude and careless person? Do you even consider the possibility that you misjudged whether it was your turn? Even if you do, once you get past the scare of a near collision, you'll almost certainly forgive yourself quickly:<sup>398</sup> You were in a legitimate hurry, you were distracted, or perhaps the sun was in your eyes. Even if this happens to you every day, you'll probably never blame yourself. Instead, you'll just be irritated that there are so many bad drivers out there.

We all think this way. Among developed countries, the United States has the second-highest traffic-related death rate.<sup>399</sup> Yet practically all Americans think they are one of the better drivers on the road.<sup>400</sup> In one survey, most respondents said they drove one-handed while they talked

on the phone, most said they went over the speed limit, and over three-quarters admitted to eating while driving, yet 99 percent still described themselves as safe drivers.<sup>401</sup>

Having an inflated opinion of ourselves is human nature – and it’s actually healthy.<sup>402</sup> However, all this delusion does have its drawbacks. Notably, it creates a huge blind spot when it comes to making risky decisions. We think we are better than most people and we don’t like being labeled,<sup>403</sup> so when we hear warnings or statistics, we think they don’t apply to us. If a man hears on the news that older, overweight people with inactive lifestyles are at greater risk of diabetes, he is likely to ignore it, even if he is 65 years old, heavysset, and gets little exercise. They couldn’t be talking about him; they must only be talking about all those other older, overweight people with inactive lifestyles.

We are wildly optimistic about our futures and think that bad things won’t happen to us,<sup>404</sup> or even to our friends and family.<sup>405</sup> We think that, because we are smarter and more in control than those “other” people, we will be able to avoid any negative consequences.<sup>406</sup> This makes us feel immune to danger, particularly when we are young.<sup>407</sup>

Compounding the problem, we think we have more free will than others.<sup>408</sup> We grossly overestimate our ability to restrain ourselves, and as a result, we often put ourselves into riskier situations than we can handle, then give in to temptation.<sup>409</sup> We start new a diet thinking we can stick to it, but we don’t. When we fail, we blame the diet, or the holidays, or unforeseen stress, or anything but our own lack of willpower. Then we start a different diet and start the process over again.<sup>410</sup>

## THE SCORPION AND THE FROG

Our eating decisions provide a great way to illustrate how our ability to control our impulses depends on the situation. We might swear off sweets after gorging ourselves at a buffet, or after our doctor tells us we should lose weight. However, making a promise in that situation is the easy part; keeping it in another is a different matter. There is a big difference between resisting some imaginary cookie when you aren't hungry and turning down a real cookie in your hand when you haven't eaten all day.

We make optimistic plans like this in what psychologists call a “cool” state, that is, when we are calm and rational enough to think about the future. Unfortunately, we frequently have to make decisions in a “hot” state, such as when we are angry, tired, or hungry, when we do not have the luxury of such clear thinking.<sup>411</sup>

Even as intelligent beings, we often make decisions contrary to our best interests.<sup>412</sup> We trade in our long-term well-being for immediate gratification. We eat that cookie even though we are trying to lose weight. We are imperfect. We don't have complete control over our behavior; if we did, we would never overeat or snap at our loved ones. Our physical urges sometimes override our intentions. No one ever decides to fall asleep while driving; it just happens.<sup>413</sup>

The way our brains operate makes the decisions we make about our health complex and very difficult to predict.<sup>414</sup> As stated earlier, we evaluate immediate and long-term rewards using completely different areas of our brains.<sup>415</sup> Emotions heavily influence our conscious decisions,<sup>416</sup> but we make most of our decisions automatically, with no thought at all.<sup>417</sup> Our bodies can figure out what we want to

do before we even know it.<sup>418</sup> In fact, the parts of the brain that make some decisions activate well before we are even aware we have made a choice.<sup>419</sup>

Furthermore, our senses can literally shut off the areas of the brain that govern higher thinking.<sup>420</sup> When we are in a “hot” state, such as when we are hungry or angry, neurons in a certain region fire more rapidly.<sup>421</sup> Unfortunately, this is the same region associated with making bad decisions,<sup>422</sup> and, no pun intended, feeling sexually aroused puts people in an incredibly “hot” state of mind.

Sexual excitement clouds logic and undermines efforts to remain abstinent. In one illuminating study, male college students were asked to answer questions about how they would act if they were aroused. Later, they answered the same set of questions when they actually were aroused. In every case, how they thought they would act and how they actually did was very, very different.

When just imagining they were aroused, most men said they could be satisfied with “just kissing.” But when actually aroused, the vast majority said that would be frustrating, including many who previously said otherwise, and aroused men were more than twice as likely to say they would keep trying to have sex after a date said “no.”

It gets worse. When sexually excited, rationality doesn’t just take a back seat; it can disappear completely. In an aroused state, these men were twice as likely to say they could imagine being attracted to a 12-year-old girl, three times as likely to think bestiality could be exciting, and five times as likely to drug a woman to get her to have sex.<sup>423</sup> This impaired mental state thwarts efforts to follow Safe Sex as well. Research has shown that, compared to how

they normally think they would act, men who are aroused are more likely to engage in risky behavior and less likely to use a condom.<sup>424</sup>

Even if we are in the habit of always wearing a seat belt, we might neglect to do so occasionally when something else is on our minds. When the time comes to decide whether or not to have sex or use a condom, though, something else is *always* on our minds.

Teens make these promises, i.e., to always use a condom or to wait until marriage, in a “cool” environment, like a classroom or a church youth group, but they have to decide whether or not to follow through under very different circumstances. Dozens of arguments that make no sense in a classroom become very persuasive in the back seat of a car. The timing feels right. The moonlight is so pretty, and our song just came on. We’re in love, or at least I think we are. We can’t really wait “forever,” so why wait any longer? Stopping to buy a condom would kill the mood. What we’re doing feels really good. Going a little farther just this one time won’t hurt.

Some people give in to temptation like this on a daily basis; a rare few can hold out for years. Everyone gives in now and then, though. Sometimes we are able to control our urges, but others times we cannot. Why is this?

Interestingly enough, modern research suggests that self-control works just like a muscle.<sup>425</sup> Whenever we deny our most basic desires, like keeping our temper in check when provoked, or exercising rather than watching TV, or even just resisting that delicious cookie, we use our “willpower muscle.” The similarities between mental strength and physical strength are uncanny. Just like muscles, our

willpower gets fatigued as we use it. The longer we continuously strain ourselves, the harder it becomes to keep controlling our behavior, although we recover with rest.<sup>426</sup> Also just like muscles, some people have more discipline than others, but everyone has their limit. Given enough pressure, anyone's willpower will give in to exhaustion.<sup>427</sup>

A wide variety of outside factors weaken this mental muscle, many of which are out of our control, like illness and injury.<sup>428</sup> Also, even though they seem unrelated, everyday activities like waiting in a line, being polite, concentrating, and even shopping all sap our willpower.<sup>429</sup> It isn't even all in our heads. It's in our hearts, or, more accurately, our bloodstreams. We tend to have more discipline when our blood sugar level is high. Yet a single act of self-control makes our blood sugar drop, making it harder to avoid temptation until we raise it again, and the resulting hunger makes dieting doubly difficult.<sup>430</sup> This phenomenon, known as decision fatigue, helps explain why we reach for comfort food in times of stress,<sup>431</sup> why eating too little while dieting is a bad idea, and even why we tend to eat more junk food at night, after our willpower has been worn down by making decisions all day.<sup>432</sup>

On the other hand, unless we are on the brink of starvation, sex is much more tempting than food. If relatively small factors can lead us to eat a cookie after we told ourselves we would cut back, imagine how much more tempting a willing partner can be to a sexually aroused virgin. We all know that, throughout our lives, events occasionally conspire to create pressure that would break almost anyone's resolve. Yet both Safe Sex and Abstinence-Only demanded perfectly controlled behavior for the

majority of the average American's life,<sup>433</sup> including almost 15 consecutive years between becoming a teenager and getting married – the time when opportunity is highest and wild surges of hormones spike the sex drive.<sup>434</sup> To expect teenagers to follow either strategy meant thinking that their willpower would never be strained enough to make a misstep at any point during the trials of adolescence or early adulthood.

Telling young people that these were good goals did them a disservice. One side said they would be safe if they vowed to always use a condom, despite the reality that this is more difficult than lessons made it seem. The other side said they would be safe if they pledged to wait until marriage, ignoring the fact that almost no one actually does this. Such over-optimistic thinking is dangerous: It leads to risky behavior and illusions of invulnerability.<sup>435</sup> Adolescents already felt bulletproof<sup>436</sup> and this false sense of security just made it worse.<sup>437</sup> Students thought that by making a solemn pledge in a classroom, they would be protected. In the heat of the moment though, when their willpower was at its weakest, these promises proved too difficult to keep.

## **GETTING THE FOOT IN THE DOOR**

Fortunately, the Slow Down Project introduced a much better alternative. Whereas Safe Sex seemed too easy to take seriously, and Abstinence-Only seemed impossible, the Three Month Rule was empowering because it was an ideal goal: It was specific and realistic, but still pushed people's limits.<sup>438</sup> A three month wait was long enough to demand real effort, particularly back when people typically only waited three dates, but short enough that young people could easily visualize themselves following the Rule,

which dramatically increased the chances that they would do so.<sup>439</sup>

Ultimately, asking people to wait for a short time resulted in more long-term abstinence than telling them to wait until marriage. This seemed counterintuitive to policymakers, but not to the business world. In sales, this is known as the “foot in the door” approach. Asking for a large commitment right off the bat turns people off and scares them away. On the other hand, getting someone to make a small commitment is not only easier, but also makes them more likely to make a larger commitment in the future.<sup>440</sup>

Psychologists explain this phenomenon with cognitive dissonance theory, which says that whenever we choose between two courses of action, we regret giving up the benefits of the option we turned down. In order to make ourselves feel better, we subconsciously change our opinion of both options, improving our perception of the route we took and lowering our opinion of the one we didn't.<sup>441</sup> In fact, making decisions physically changes us. Once we make a choice, our brains neurologically rewire themselves to expect more reward from making that decision again.<sup>442</sup>

The Three Month Rule let people experience a rewarding feeling again and again by giving them more opportunities for success, which helped them stick to their conviction. We have the best chance of controlling our behavior when we strive for difficult long-term goals, but divide them up into manageable chunks we can achieve in the near future.<sup>443</sup> Each time we overcome one of these smaller hurdles, we gain confidence in our ability to achieve larger goals.<sup>444</sup>



The previous two strategies offered no such encouragement. The core concepts of Safe Sex only applied after people were already sexually active, and even then using a condom was seen as such a small feat that it didn't feel like much of an accomplishment. On the other hand, teens who swore to live by Abstinence-Only could only truly achieve their goal once they were married – 10 or 15 years later.

The Three Month Rule, though, was a significant challenge that started over with each new relationship. When people broke up before the waiting period was over, they could pat themselves on the back for avoiding a physical relationship they might well have regretted. For those who did eventually have sex, the Rule gave them time to discuss contraception and get to know their partners better beforehand, leading to a safer and more satisfying relationship. Either way, they won, and the Rule helped them remain physically and emotionally healthy.

The Three Month Rule is formally introduced in ninth grade, but it is so ingrained in our culture that most children already know it by then. By practicing the Three Month Rule with their very first relationships, young people develop good habits early. This helps even more in the long run because willpower is also like a muscle in that it grows stronger with exercise.<sup>445</sup> These early successes build confidence in their ability to control themselves and achieve their goals, which is one of the most crucial factors influencing how people make any important decision that affects their health.<sup>446</sup>

After getting the foot in the door, the Three Month Rule does not require a persistent salesman to keep asking for larger commitments. Instead, each small success pushes

people in the right direction. When facing difficult problems, feeling empowered like this leads people to set higher goals and feel more commitment toward them on their own.<sup>447</sup>

## THE WIND AND THE SUN

The final factor that made Gaga's movement so empowering was not what she said, but how she said it.

As human beings, we value our independence. We like to be in control of our own lives, so when people tell us what to do, digging in our heels against them is a kneejerk reaction. If this sounds childish, it is perhaps because we exhibit this behavior during our "terrible twos."<sup>448</sup> However, we act this way at various points throughout our entire lives, especially in periods of transition such as adolescence, and again in old age.<sup>449</sup> During these times, we often put up resistance whenever we feel pressured to act or think differently. Fighting efforts to change our minds is not necessarily a bad thing,<sup>450</sup> and can even make us better leaders.<sup>451</sup> It can also lead us to ignore good advice, though, even when we know following it would be our best interest.

This phenomenon is called reactance.<sup>452</sup> When we feel our freedom is being restricted, reactance automatically kicks in and makes us want to restore it. This reaction is so strong that, in an effort to assert our power and independence, we will sometimes do the exact opposite of what we are told.<sup>453</sup> This is known as the boomerang effect. We don't like being told what to do, and nothing makes us more curious about something than being told it is off-limits. The concept is as old as the story of Adam and Eve. According to Mark Twain:

*Adam was but human – this explains it all. He did not want the apple for the apple’s sake, he wanted it only because it was forbidden. The mistake was in not forbidding the serpent; then he would have eaten the serpent.*<sup>454</sup>

As a result, attempts to curb a certain behavior often fail, or can even end up encouraging it. For example, restrictions against selling songs with explicit lyrics to minors hasn’t kept them from topping the charts among young people. Likewise, warnings of sex and violence do not deter people from watching television programs; in fact, they increase interest instead, particularly among adolescents and young adults.<sup>455</sup>

The boomerang effect presents a sticky problem when trying to promote public health, especially to young people. According to a group of researchers at the University of Oklahoma:

*Many health campaigns are geared toward young audiences who want, above all, to be in charge of their own behaviors. Not yet adults, but wanting the freedoms enjoyed by adults, adolescents and emerging adults are bombarded with messages prescribing or prohibiting many of their prospective behaviors—activities they feel deserving of, competent in, and free to engage in. Thus, they are ripe for psychological reactance and may often be motivated to perform the very behaviors proscribed in many of the persuasive messages targeting them.*<sup>456</sup>

Crafting a message that resonates with young people is difficult. In 2009, the most popular youth drug prevention program in the United States, *D.A.R.E.*, was taught in every state and in about three out of four school districts.<sup>457</sup> Yet just a few years earlier, the Surgeon General concluded the

program didn't work, citing "numerous well-designed evaluations and meta-analyses that consistently show little or no deterrent effects on substance use."<sup>458</sup> In fact, in 1998 researchers found the program to increase drug use,<sup>459</sup> and in the same year the program lost its federal funding for being unable to prove it was effective. *D.A.R.E.* wasn't alone. A 2011 meta-analysis found no studies showing anti-drug public-service announcements to have a significant benefit. Worse, a few studies found these messages actually made people more interested in using drugs.<sup>460</sup>

Campaigns like this can have unintended effects because teens react negatively to authority. For example, telling teens to "just say no" actually makes kids more likely to want to try drugs.<sup>461</sup> Just as in the Garden of Eden, disallowing something turns it into forbidden fruit. Similarly, when high school students are told not to smoke, it makes them want to smoke more. Interestingly, however, telling the same teens they *should* smoke actually makes them want to smoke *less*.<sup>462</sup> No matter what the message is, dictating which decisions adolescents should make about their health makes them want to do the opposite.

Nobody knows how teenagers like to reject authority better than cigarette manufacturers, which helps explain why they run youth anti-smoking campaigns. Almost everyone who smokes as an adult begins in their teens.<sup>463</sup> Would a \$600 billion industry really make ads that hurt its bottom line?

Anti-smoking ads created by tobacco companies do not convince people not to smoke.<sup>464</sup> These ads actually increase smoking in children<sup>465</sup> and make young people think more positively about tobacco companies.<sup>466</sup> That these ads do the opposite of their supposed purpose is no

accident. Cigarette manufacturers have created some of the most persuasive marketing campaigns in history and know exactly what they are doing.

Decades ago, anti-smoking experts told them to avoid certain tactics, such as specifically telling kids not to smoke, or saying that smoking is uncool or for adults only.<sup>467</sup> This was good advice,<sup>468</sup> but the tobacco industry went directly against it. Instead, they used the opposite of these recommendations as a blueprint to craft the most deceitful “anti-smoking” messages possible. One major slogan: “You can be cool and not smoke,” a message which reinforces the underlying idea that smoking is an easy way to be cool. It may as well say, “You don’t *have* to smoke to be cool, but it sure helps.” Another: “Tobacco is whacko, if you’re a teen,” a message that suggests smoking is fine for adults, which teens desperately want to be.

Forbidding something cool is the perfect recipe for piquing adolescent interest. Unfortunately, this is exactly what most Abstinence-Only messages did. Decades of marketing convinced entire generations that smoking was cool. Sex needed no such help, but it got it anyway from countless television shows, movies, magazines, and songs.

For a campaign promoting abstinence to work, it couldn’t follow the same pattern as anti-smoking ads, or else it would result in the same boomerang effect. A successful message couldn’t just tell teens not to have sex, since they don’t like being told what to do. It couldn’t tell them that premarital sex is uncool, since teens also don’t like being told what to think. And it couldn’t tell them sex is only for adults, since they don’t like being treated like children.

Despite the challenges, however, media campaigns are not doomed to fail.<sup>469</sup> People can be persuaded to make better choices about their health, but they have to be asked in the right way.<sup>470</sup> The key word here is “choices.” To avoid reactance, a campaign must make people feel that all decisions are ultimately their own. The trick to preventing the boomerang effect is to respect the audience. Neither Safe Sex nor Abstinence-Only did this, which is why young people did not pay as much attention to them as they did to Gaga’s message. Instead of treating them with respect, both previous strategies underestimated teens and patronized them.

## **SEX, LIES, AND CONDESCENSION**

Abstinence-Only treated students as unable to make their own decisions, asking them to replace their own judgment with an unconditional “no.” The Safe Sex approach skipped the choice altogether, assumed most teens could not be abstinent, and jumped right to maintaining public health.

Safe Sex also assumed young people would shy away from anything difficult, so it presented condoms as easier to use than they actually are. On the other hand, Abstinence-Only acted as if refraining from sex were simple, encouraging teens to trust their well-being to a rule that hardly anyone was able to follow.

Safe Sex ignored the power of personal values, which was the main reason teens remained virgins.<sup>471</sup> Abstinence-Only, on the other hand, said premarital sex was wrong, an idea with which few people agreed,<sup>472</sup> and one that was based in religion, which is problematic in a nation as diverse as America.<sup>473</sup> Public health messages are counterproductive to people who disagree with their

underlying ideology,<sup>474</sup> and repeating them just makes it worse.<sup>475</sup>

Treating teens with such little respect did not help either cause. Ask any teacher: Young people can smell insincerity and hypocrisy a mile away, and when they do, they shut down. In a *Washington Post* article titled “They’ll Abstain If They’re Given Good Reasons,” a 30-year sex education veteran said:

*Once they realize that what adults are telling them is in any way disingenuous, they stop listening, no matter how good that advice may be.*<sup>476</sup>

Adolescents, particularly high school students, are more perceptive than adults think they are. They readily spot false data and bad arguments, and they resent being controlled or kept in the dark. Given enough information, they can and will form logical and beneficial conclusions about their health.<sup>477</sup> Safe Sex and Abstinence-Only, however, told just one side of the story, but teens wanted to hear both. In 2010, a national survey asked teens which type of sexual health strategy they wished they could learn more about. Only about one in ten wanted more information about just abstinence, and only about two in ten wanted to hear more about just birth control. The largest group by far wanted to learn more about both.<sup>478</sup>

Even though teens outwardly reject authority, they inwardly crave guidance. In that same survey, nine out of ten teens said that they should be given a strong message to wait at least until after high school to have sex. The survey also showed that, despite the assumptions Safe Sex and Abstinence-Only made about them, teens care more about healthy relationships than sex. Again, nine out of ten

said they would prefer to have a boyfriend or girlfriend but not have sex, as opposed to having sex but not having a relationship.<sup>479</sup>

## LEADING, NOT COMMANDING

Lady Gaga knew exactly how teens thought, in part because she was not far from being one herself. It is easy to forget this fact now that “Mother Monster” is old enough to be a grandmother, but Gaga began recording her first multiplatinum album when she was only 21, and she released *Born This Way* just a few years later. One of the reasons the Slow Down Project was so successful with young people was that Gaga knew how to talk to them.

She did not presume to say what was best for them or tell them how they should live their lives. Instead, Gaga said she wanted to beat a disease, and she asked them to join her. Inviting people to walk beside you is a world apart from commanding them to follow and obey, especially when trying to influence young people. Gaga respected them enough to challenge them with a difficult goal, but did not say they were morally wrong if they did not comply.

Furthermore, Gaga rode a fine line, giving strong guidance without seeming like an overprotective parent. *Slow Down*, like the traffic sign after which its album cover was modeled, was a reasonable request for caution. By comparison, for teens, Safe Sex was a green light at the onramp to a dangerous freeway. On the other hand, Abstinence-Only looked like a thousand stop signs on a long, deserted road. *Slow Down* was a warning sign; it did not tell people to stop or go. Instead, it prompted them to pay attention to potential danger ahead, and it did so in a way that caught their attention.



Gaga's movement was empowering because she didn't tell people exactly what to do, but trusted them to make the right decision if they just used more of their own judgment. She avoided the boomerang effect because she requested cooperation instead of demanding obedience. This made the Three Month Rule come across as good advice from a peer rather than an order from an out-of-touch authority figure.

*Slow Down* made teens feel mature because it gave them the same advice as adults: It asked everyone to think more about what they are doing. Gaga did not talk down to young people, and being treated with such respect struck a chord with them. After all, one of the primary reasons adolescents engage in any problem behavior, like smoking, drinking, or having sex, is specifically to feel or appear more mature.<sup>480</sup>

Both of the previous strategies only made this worse by reinforcing the idea that sex is a mark of maturity. Safe Sex said that responsible adults use protection when having sex, while Abstinence-Only locked sex behind the distant future of marriage. Rather than focusing on sex itself, Gaga said that true maturity means taking responsibility for our own decisions. The Three Month Rule forced people to privately answer some hard, unspoken questions: If I have serious doubts that a relationship would last three months, is it even worth pursuing? What about partners who won't wait a few months? What does that say about how they really feel about me? Is sex with someone who won't wait a good idea?

Gaga made asking these questions seem like the adult thing to do. This meant that rushing into sex, by comparison, seemed juvenile, reversing decades of social

stereotypes. Years ago, students who chose to remain virgins in high school were viewed as immature among their peers. Today, those who follow the Three Month Rule are seen as smart and independent thanks to Gaga, who finally broke through to young people by treating them with respect.

### **REASON #3: GAGA LEVERAGED HER STAR POWER**

Gaga made it cool to wait, something that parents and sex education teachers could never do because they were hopelessly out of touch with the lives of teens. Parents thought they had done a good job keeping their children from having sex. Part of their overconfidence was human nature: Just as we think we are different from everyone else, we also think that our children are different, too.<sup>481</sup> Along those lines, parents thought that teen life in general revolved around sex, but that this didn't apply to their own children, whom they still saw as innocent and naïve.<sup>482</sup>

Most of them were wrong, though. About three-quarters of parents of sexually experienced early teens mistakenly thought their children were still virgins. And even though most students had sex by their junior year in high school, most of their parents had no idea.<sup>483</sup>

Parents thought they had done a good job talking to their children about sex, but the facts told a different story. In one survey, nine out of ten parents of teens said that they had led a helpful parent-child conversation about delaying sex and avoiding teen pregnancy. However, when asked the same question, teens were three times as likely as parents to say this had never happened.<sup>484</sup>

Furthermore, four out of five teens said it would be much easier to postpone sex and avoid pregnancy if they could have open, honest conversations about these topics with their parents.<sup>485</sup> But even when parents did discuss sex with their children, it was frequently too little, too late. One study found that even among fairly affluent, educated parents, 40 percent didn't talk about sex until after their children had already begun having it.<sup>486</sup>

Parents were more influential than they realized,<sup>487</sup> but talking about sex was uncomfortable, and all too often they passed the buck to the school system, which unfortunately was less influential than they thought. Educators did not know how to communicate effectively with teens, largely because those responsible for developing and teaching sex education courses were products of another era. Society had changed radically since they were young, and social norms were not what they used to be.

This generation gap left adults with misguided ideas about both major sex education strategies. Many adults thought that Safe Sex sent a mixed message that could encourage students to have sex. While this might have been true for parents, it wasn't true for their kids.<sup>488</sup> Abstinence-Only suffered a similar fate. The cornerstone of the approach was the idea that premarital sex was wrong, but that argument fell flat because American society didn't feel that way anymore. In the 1970s, most people did think premarital sex was wrong, but by the end of the 1990s, fewer than three in ten thought that way. On the contrary, most young people thought it was a good idea for people to live together before marrying,<sup>489</sup> and only one in ten teens felt sure he or she would get married without living with someone beforehand.<sup>490</sup> Times had changed, and it was

hard to make a moral argument against something that society generally accepted.<sup>491</sup>

The same parents who didn't even talk to their children about sex got up in arms about which type of sex education was taught in school. Yet they would have been better off worrying about what their children learned at home, because there is a huge difference between how convincing such messages seem and how much they actually change behavior.<sup>492</sup> Telling people how to run their lives only seems persuasive to people who already agree with the advice, and annoys those who don't.<sup>493</sup> In fact, for all the bluster on both sides of the Safe Sex vs. Abstinence-Only debate, neither approach made very much impact. Even the most successful programs only made small changes; many made none at all.<sup>494</sup> Plus, regardless of the material they were supposed to teach, sex education teachers were no different from other adults in that they still treated teens as being too immature to know about sex, and it showed in their lessons.<sup>495</sup>

Experts did not know how to get through to young people, but what they did know is that teens paid more attention to the media than to stodgy academics like themselves. One team found that dramatic television shows about teen pregnancy were far more persuasive than the format used by sex education classes.<sup>496</sup> Another researcher who studies social movements and substance abuse said:

*Rap music is like CNN for black teens. But much of what is discussed in rap is in code. The kids understand, but parents don't.*<sup>497</sup>

Since young people paid so much attention to music and pop culture, who better to lead a revolution than Gaga?

## YOUNG PEOPLE LISTENED TO GAGA

It is difficult to overstate the magnitude of Gaga's superstar status. Since she has been a global trendsetter in music and fashion for over 30 years, it's easy to forget how much sway she had when she was just starting her career. A month after she turned 24, *Time* listed Gaga as one of the world's most influential people; by one measure, she was second only to then-President Barack Obama.<sup>498</sup> A year later, *Forbes* named her the most powerful celebrity in the world.<sup>499</sup>

Gaga was a cultural juggernaut, which put her in a powerful position to effect change. Fortunately, unlike many who achieved stardom, she took responsibility for her fame. In a 2010 interview, she said:

*When you're in the public eye, you're a role model whether you want to be or not. And I want to be. I'm not one of those self-obsessed artists who don't care about their fans. It's not just about the music. I look out ... and there are eighteen thousand screaming young people and I have a responsibility to them – and you're an idiot if you don't know that.<sup>500</sup>*

After *Born This Way*, Gaga had reached a point where no matter what she produced, it would have been a hit. Instead of resting on her laurels, she challenged herself, and used her position to put a socially beneficial message at the top of the charts. Gaga could have made anything cool. Luckily for us, she chose sexual responsibility.

When teachers and religious leaders told them to rein in their behavior, many young people were skeptical and resisted. But when Gaga asked, they responded with enthusiasm, and her authenticity was unquestioned because she had been championing the cause for years.

Like many other celebrities, she helped raise money for AIDS charities<sup>501</sup> and frequently performed at benefits,<sup>502</sup> but she also used her singular ability to command the media to call attention to social issues. In 2011, for example, in a stunt only she could have pulled off, Gaga wore a full-body “latex-condom-inspired outfit” to appear on *Good Morning America* to raise AIDS awareness.<sup>503</sup> Later that same year, she wore a black veil and 16-inch heels to tower over President Obama when she spoke to him about preventing bullying.<sup>504</sup>

The older generations, who saw only her outlandish clothing and didn’t listen to her music, were skeptical about the star’s sincerity. However, years before *Slow Down*, Gaga had already frequently gone out of her way to bring up sexual responsibility in interviews:

*...you should wait as long as you can to have sex...<sup>505</sup>*

*If you can’t get to know somebody, you shouldn’t be having sex with them ... in this day and age, we have grown up and we now know that we can’t be that free with your love.<sup>506</sup>*

*I’m single right now and I’ve chosen to be single because I don’t have the time to get to know anybody. So it’s OK not to have sex, it’s OK to get to know people. I’m celibate, celibacy’s fine ... Something I do want to celebrate with my fans is that it’s OK to be whomever it is that you want to be. You don’t have to have sex to feel good about yourself, and if you’re not ready, don’t do it ... it’s not really cool any more to have sex all the time. It’s cooler to be strong and independent.<sup>507</sup>*

## SHARING HER FORTUNE OF FAME

Gaga made her movement work by shrewdly using her position as a media superstar. Before anyone wonders why

other celebrities have not achieved similar success with their own pet causes, it is important to recognize why what she did was so different.

First, Gaga followed through with more than a few casual comments at an awards show. She didn't just try to promote awareness about a problem. She had a solution, a new idea, and she didn't just talk about it, she took action. Instead of treating the Slow Down Project as a side project, she dedicated her career to her cause. For years, the press could not even mention Lady Gaga without talking about the Three Month Rule.

More importantly, while Gaga truly believed in her cause, she knew that despite her fame, no single artist could reach enough people to start a sustainable movement. By working with a wide variety of different musicians, she ensured that the message, rather than herself, took center stage. She recorded songs with other contemporary pop singers, like Katy Perry and Justin Timberlake, and also with popular artists from other genres, like Taylor Swift and Jay-Z, who reached the core audience of young people immediately. Furthermore, she collaborated with living legends like Billy Joel, Neil Diamond, and Paul McCartney, helping these talented songwriters re-enter the charts and introducing them to a new generation of listeners. Few throughout history have had the gravitas to draw in so many A-list celebrities, but between her popularity and the cause she was promoting, getting to share Gaga's spotlight was an opportunity few could pass up.

Everyone who participated in the Slow Down Project got their music played on new radio stations and heard by people who had never listened to them before. This not only boosted everyone's sales, but also gave Gaga's

message incredible reach. No matter how old they were or what type of music they listened to, virtually everyone heard *Slow Down* in one form or another, whether they liked Lady Gaga or not. In fact, many people did not even associate the movement with Gaga. To rap fans, it was Kanye West's movement. To country fans, it was Toby Keith's. With all she did, it is easy to overlook that Gaga never even made her own version of *Slow Down* (at least not one with lyrics). The greatest expression of her musical genius was making an anthem that worked across multiple genres, then letting others make it their own.

This is why the Slow Down Project worked so much better than public service announcements. Most musicians who lend their celebrity to PSAs end up producing stilted ads that prompt young people to roll their eyes, not change their behavior. With Gaga, though, artists stuck to what they were best at: making music. Unlike PSAs, the message was not tuned out along with the rest of the ads played between songs. The songs were the message, and fans requested them, sang along, made their own versions, and shared them with friends. Whether sung by their favorite artist on the radio or by a classmate on Facebook, people heard *Slow Down* from someone they identified with. This made young people more receptive, and many who had previously rejected the idea of waiting took it to heart.<sup>508</sup>

These dynamics did not have nearly as much effect on older people, who were not as influenced by new music or social networking applications. This helps explain the unfortunate fact that the movement never caught on outside the youngest generation, which was a larger problem than many realized at the time. Thanks largely to the wide availability of erectile dysfunction drugs, people



were staying sexually active well into their eighties,<sup>509</sup> but they were doing so very irresponsibly. People over 50 rarely used condoms,<sup>510</sup> and among all age groups, were the least likely to get tested or know their HIV status.<sup>511</sup> They rarely talked to their doctors about sex, but they were most likely to have sexual health problems that amplified the risk of HIV.<sup>512</sup> To top it off, they knew very little about the virus and didn't think they were at risk.<sup>513</sup>

Despite the fact that it was soaring among people over 50,<sup>514</sup> older Americans simply didn't care very much about HIV.<sup>515</sup> All in all, they were set in their very risky ways and they weren't about to change because of something Lady Gaga said. Young people, on the other hand, decided to take responsibility for their actions,<sup>516</sup> and made living by the Three Month Rule a personal goal. Ultimately, this helped them make better decisions,<sup>517</sup> even when it meant putting off something they wanted for a little while.<sup>518</sup> On average, the few people who contract HIV today do so at a much older age than 30 years ago, which, combined with advances in medicine, is why AIDS, once thought of as a gay disease,<sup>519</sup> then later a black disease,<sup>520</sup> is now thought of as a senior citizen's disease, and is quickly dying out.

## **REASON #4:**

### **A SMALL WAIT MAKES A BIG DIFFERENCE**

In the end, the cumulative effect of all those short waits turned out to be larger than anyone could have guessed. Anyone but epidemiologists, that is.

Despite the best efforts of educators (and longwinded writers), people oversimplify ideas. They ignore the fine

details and remember only the concepts that make the idea unique.<sup>521</sup> If you had to sum up the concept of Safe Sex in three words, you might say: “Use a condom.” Likewise, Abstinence-Only becomes: “Wait until marriage.” By comparison, modern sex education seems complicated. To recap, the AWAKE method consists of five rules:

Illustration: AWAKE Method



Although Gaga advocated all five of these guidelines, people stripped her message down to the bare essentials right from the start as well. Four of the ideas were already familiar, since various groups reinforced them constantly. Parents and religious leaders taught abstinence and fidelity, and public health campaigns promoted STD testing and condoms. This left the Three Month Rule as the most unique part, and it became the essence of the idea. Boiled down to just a few words, the heart of the movement came across as: “Wait three months.” Fortunately, that was good enough.

All people had to do was follow the “wait” part and the rest came naturally. The delay gave couples ample time to get tested and discuss contraception, and also gave casual

relationships the opportunity to burn out before they became physical. For those who did eventually have sex, waiting let them build a closer bond beforehand, which strengthened the relationship and lowered the chances of infidelity. The side effects of waiting reached much further than that, though.

Thirty years ago, despite numerous public health initiatives, America was making little headway against the spread of HIV. Before Gaga introduced the Three Month Rule, the number of new annual cases had remained the same for 20 years.<sup>522</sup> We were not winning the war against AIDS, yet some of the people affected the most by the disease were the least concerned. A team of researchers who visited six US cities to interview thousands of young MSM found that half the men who had HIV, but didn't know it, thought they were at low risk.<sup>523</sup> In response to their findings, the CDC said:

*Even more troubling are studies showing that some of the populations with the highest rates of infection (including men who have sex with men and African Americans) either do not recognize their risk or believe HIV is no longer a serious health threat.<sup>524</sup>*

People had stopped caring, and we had been stalled for two decades. Then, immediately after Gaga released *Slow Down*, the number of new annual cases of HIV started to drop.

Exactly how did a pop singer help turn the tide in the battle against an incurable disease? The answer to this question lies not in music, but in math.

## THE WISDOM TO KNOW THE DIFFERENCE

Epidemiologists use mathematical models to describe how diseases affect a population. These allow scientists to do everything from predict how serious this year's flu season will be, to explain how the bubonic plague wiped out over a third of Europe in the 14th century.<sup>525</sup> The equations that make up these models show how different variables interact to affect the spread of a disease. For example, an equation used to calculate the impact of an airborne bacteria might include its ease of transmission and the average number of healthy people each infected person comes into contact with. One of the most important purposes of these models is to help prevent epidemics. In the previous example, if the bacteria were determined to be particularly contagious, experts might advise people to wear masks or stay at home, if possible, to limit their exposure. Unfortunately, HIV's unique blend of properties makes it very different from other diseases, and many of the variables that make it so difficult to contain are beyond anyone's control.

To begin, one of the key factors that affects how a disease spreads is the incubation period, that is, the length of time between when a person gets infected and when symptoms begin to appear. Although unpleasant, these symptoms are useful because they let carriers know they should seek treatment and warn healthy people to be more careful around them. Whereas viruses that cause the common cold make themselves known within hours,<sup>526</sup> HIV typically takes about ten years to develop into AIDS, giving it one of the longest incubation periods of all infectious diseases.<sup>527</sup>

Another important variable is the length of time a person can pass an infection on to others. Those with a cold, for

instance, are typically most contagious for a few days, and are completely healthy within a few weeks.<sup>528</sup> More serious diseases don't go away on their own, but even chlamydia is cleared up a week after taking antibiotics.<sup>529</sup> However, HIV is incurable. This means that, unlike most other infections, once people contract it, they can spread it to others for the rest of their lives.

Furthermore, due to advances in antiretroviral drug therapy, many HIV-positive people in developed countries like the United States were living longer than ever,<sup>530</sup> nearly as long as if they didn't have the disease.<sup>531</sup> While this was great news for individuals with HIV, from a public health perspective, it also complicated the eradication of the virus. Extending carriers' lives meant lengthening the period of time during which they could infect others. Even though drug therapy reduced the chances of this happening,<sup>532</sup> regrettably, many continued having unprotected sex even though they knew they had HIV.<sup>533</sup>

Being incurable and largely invisible made HIV a formidable opponent, forcing prevention strategies to focus on what people could actually control: their own decisions. Abstinence-Only promoted the only surefire way to avoid getting HIV through sex, and Safe Sex offered a low-risk alternative. Either approach would have worked in theory, but neither persuaded enough people.

On the other hand, asking them to wait a few months was a much easier sell, and far more people complied. On its own, the Three Month Rule could not offer an impressive level of clinically-proven protection like abstinence or condoms. As the mathematics of epidemiology help explain, though, convincing many people to wait made an enormous impact on curbing the spread of HIV.

## HOW HIV WAS BEATEN, BY THE NUMBERS

When epidemiologists study an outbreak of a disease, one of the most important values they calculate is the “basic reproductive ratio,” or  $R_0$ , which is essentially the number of healthy people to whom the average infected person will spread the disease.<sup>534</sup> This ratio determines whether the outbreak will end on its own, hold constant, or become an epidemic.

If  $R_0$  is exactly one, it means that each person carrying the disease infects, on average, one and only one other person. When this happens, a disease is said to be endemic, or self-sustaining in a steady state. A good example of an endemic disease in the United States was chicken pox until the mid-1990s. For decades before a vaccine was developed, about the same amount of young people got chicken pox each school year. The disease was not an epidemic, but it also wasn’t going anywhere.<sup>535</sup>

When  $R_0$  is less than one, it means that people are not spreading the disease enough to sustain it, so it will eventually die out on its own. On the other hand, when  $R_0$  is greater than one, it means that each infected person typically spreads the disease to more than one other person. The total number of infected people continually grows, forming the scientific definition of an epidemic.

To slow the spread of a disease,  $R_0$  must be reduced. The exact amount it must be reduced to end an epidemic can be calculated with this equation:

Illustration: Equation A – Critical efficacy of an intervention<sup>536</sup>

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$$p_c = \frac{R_0 - 1}{R_0} = 1 - \frac{1}{R_0}$$

$p_c$ : critical efficacy of intervention

$R_0$ : basic reproductive ratio

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The key idea to understand about the formula is that the success of a public health campaign depends entirely upon its ability to affect a single variable:  $R_0$ .

This ratio varies widely among different socioeconomic groups,<sup>537</sup> and calculating a precise value for  $R_0$  can take into account dozens of complicated variables, ranging from the probability of contact between different age groups to seasonal effects on behavior.<sup>538</sup> For our purposes, however, the exact number is not crucial; what is most important is that the number needed to be reduced. Therefore, we can use a simplified method of calculating  $R_0$  for HIV:

Illustration: Equation B – Basic reproductive ratio for HIV<sup>539</sup>

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$$R_0 = \beta c D$$

$R_0$ : basic reproductive ratio

$\beta$ : transmission probability

$c$ : rate of sexual partner change

$D$ : duration of infectiousness

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In plain English, this equation means that the number of people each person with HIV typically infects is the product of three variables: The chance to transmit the virus through sex, the amount of contact with HIV-negative people, and the time during which the virus could be transmitted. Lowering the value of any of those three variables would decrease  $R_0$ . Following the Three Month Rule, as it turns out, dramatically reduces all three.

First, waiting reduces the transmission rate by improving communication between sexual partners. The most effective way to reduce the chance of transmission during sex is to use a condom; however, before the Rule, most young people didn't even discuss contraception before having sex. Waiting gives them more time to talk about condoms and plan ahead, which makes them far more likely to actually use one.<sup>540</sup>

Another factor that affects the transmission rate is the presence of another sexually transmitted disease, especially those that cause ulcers.<sup>541</sup> For instance, genital herpes (HSV-2) multiplies the risk of HIV transmission by three times.<sup>542</sup> Waiting gives couples more time to get tested before they have sex, and not just for HIV, but for other STDs as well, and also gives these other diseases time to develop symptoms before a carrier unknowingly passes it on to a partner.

Second, following the Three Month Rule reduces the frequency with which people change sexual partners. Waiting three months limits people to a maximum of four partners per year, a number sometimes attained in a month of college hookups during the early 2000s.<sup>543</sup> (In practice, those following the Rule don't even come close to this number.) This eliminates casual sex between people



who are not dating, reducing the number of healthy people exposed to each HIV-positive person.

The Rule also helps those who are uninfected remain that way. As stated earlier, waiting longer builds longer lasting, more satisfying relationships. As a result, following the Rule leads not only to fewer new partners, but also less infidelity, meaning a lower chance of bringing the virus into what the other partner thought was a monogamous relationship. These changes also had a considerable impact, since the practice of having more than one partner at once exponentially increases the spread of HIV.<sup>544</sup>

Finally, waiting affects the timing of sexual activity, which makes more of a difference than most people realize. HIV consists of three main stages, during which the viral load, that is, the concentration of the virus in the body, changes greatly.<sup>545</sup> This is important because the greater the concentration of the virus, the greater the risk of transmitting the disease. In fact, in one study, no risk factor predicted the transmission of HIV through heterosexual sex more accurately than viral load – not frequency or type of sexual activity, not the use of condoms, not even whether the infection had progressed to AIDS.<sup>546</sup>

Shortly after infection, the virus replicates rapidly. During this first stage, people often experience flu-like symptoms, like fever and fatigue, which last less than two weeks.<sup>547</sup> The viral load soon drops sharply though, and within two months, it falls about 99 percent from its peak.<sup>548</sup> This marks the beginning of the second stage, during which people experience no symptoms and the viral load remains relatively stable at a lower level, making transmission more difficult. Untreated, this stage typically lasts about ten

years<sup>549</sup> before progressing to the final stage, AIDS, after which most people do not survive more than a few years.<sup>550</sup>

Over the course of the disease, the viral load rises again, but it never reaches the level seen at the beginning. It peaks in the period between the third and eighth week after initial infection, during which scientists estimate the virus to be eight to 26 times more likely to be transmitted than during the second stage. It may be hard to believe, but having sex with an HIV-positive person during these first few weeks is several times more likely to result in an HIV infection than having sex with an obviously sick person who is about to die from the advanced stages of AIDS.<sup>551</sup>

People seem healthy, but aren't. This lack of symptoms is one of the factors that made HIV so difficult to control. Before the Three Month Rule, most HIV infections in the United States were transmitted by people who didn't know they had the virus, a major factor driving the epidemic.<sup>552</sup> This high ratio can be explained by the following equation:

Illustration: Equation C – Presymptomatic infection ratio<sup>553</sup>

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$$\theta = \frac{\int_0^{\infty} \beta(\tau)S(\tau)d\tau}{\int_0^{\infty} \beta(\tau)d\tau}$$

$\theta$  : ratio of infections before symptoms develop

$\beta(\tau)$  : infectiousness, function over time

$S(\tau)$  : improbability of symptoms, function over time

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This equation simply states that the number of people who catch a disease from those who show no symptoms

depends upon the infectiousness of the disease and the chance of symptoms showing, both of which are complex variables that change over time.<sup>554</sup> The higher this ratio, the harder an outbreak is to control. This helps explain why deadlier diseases like SARS and smallpox outbreaks have been easier to contain than the flu.<sup>555</sup>

For HIV, danger was most concentrated in the first stage: When people had the lowest chance of knowing they were HIV-positive, yet infectiousness was at its highest. As would be expected, before the Three Month Rule, a disproportionate amount of HIV infections occurred during this time.<sup>556</sup> However, Gaga's movement added a new variable to the equation: The probability of having sex at a given time in relation to becoming infected. People who follow the Rule avoid sex during the first stage of HIV, which counteracts the spike in risk during this dangerous period and reduces the spread of the disease yet again.

The final reason that the Slow Down Project worked so well came down to math. The success of any effort to contain an epidemic is completely dependent on reducing the basic reproduction rate, which, in turn, is the product of three complex variables. Following the Three Month Rule reduces all three of them at the same time, which compounds the benefits and makes even small changes exponentially more effective. All these improvements added up. With how long the annual rate of new infections had remained in a delicate balance, the total change was more than enough to tip the scales, turning an epidemic into a disease that experts predict will soon be rare in developed countries.<sup>557</sup>

## CONCLUSION

Making headway against an incurable disease after 20 years of running in place was no minor feat. This is why, above all her other accomplishments, history will remember Lady Gaga as a crusader in the war against AIDS, one who fought by using a microphone instead of a microscope.

In many ways, a good idea is a lot like a deadly virus. They both move from person to person and throughout a population in remarkably similar patterns,<sup>558</sup> and neither will survive long unless they reach enough people and become self-sustaining. Often the original source is difficult to pinpoint, but in this case, it is clear. Gaga spread her idea throughout the entire music industry, using her superstar status to share a new message with millions. She created an epidemic of her own by giving a new idea the strong enough start it needed to infect an entire generation.

She asked people to join her, she showed them how responsibility could be empowering, and she got them to make her cause their own. Ultimately, she convinced them to rethink casual sex, and to wait a little longer before hopping into bed with someone new. While fighting HIV was her primary goal, we can't lose sight of all the other ways this helped. Today, crime continues to fall, abortion is rare, and most of us are happier with our relationships and our love lives. All because we listened when she told us to "slow down and think about it."

## AUTHOR'S NOTE: THANK YOU

Thank you very much for taking the time to read this book; I hope you enjoyed it. If you did, you may want to read the other books in the *Tales from 2040* series included in this collection:

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## ABOUT THE AUTHOR

Born in 1979, Christopher Cardinal grew up in rural Nevada and now lives in San Diego, where he works at a marketing and technology consulting firm he started in 1993.

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Cheryl Tan. (2009) “Wedding, Engagement-Ring Spending on the Decline.” The Wall Street Journal. Jan. 28, 2009. [Link](#)

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Staff Reporter. (2007) “It’s a Wedding, Wedding World!” People. Jul. 13, 2007. [Link](#)

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B.L. Meel. (2003) “The Myth of Child Rape as a Cure for HIV/AIDS in Transkei.” *Medicine, Science, and the Law*. Vol. 43, No. 1, pp. 85-88.

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Melisa Holmes. (1999) “Sexually Transmitted Infections in Female Rape Victims.” *AIDS Patient Care and STDs*. Vol. 13, No. 12, pp. 703-708.

42. William Mosher, Jo Jones. (2010) “Use of Contraception in the United States: 1982-2008.” *Vital and Health Statistics*. Vol. 23, No. 29, pp.1-44.

Linda Piccinino, William Mosher. (1998) “Trends in Contraceptive Use in the United States: 1982-1995.” *Family Planning Perspectives*. Vol. 30, No. 1, pp. 4-10.

Kate Zernike. (2006) “Use of Contraception Drops, Slowing Decline of Abortion Rate.” *The New York Times*. May 5, 2006. [Link](#)

43. “Rates of safe sex peaked in the early 1990s but, soon afterwards, heterosexuals began to realise that their risk of HIV was limited - it is mostly transmitted through sexual contact between men - and gave up using condoms regularly.”

Ruth Pollard. (2006) “Unsafe Sex Drives HIV Infection Rate to 10-Year High.” *The Sydney Morning Herald*. Oct. 12, 2006. [Link](#)

44. Some studies suggest that men who have sex with men engage in riskier behavior because advances in AIDS treatment have led them to fear AIDS less.

Ineke Stolte, Nicole Dukers, Ronald Geskus, Roel Coutinho, John Wit. “Homosexual Men Change to Risky Sex When Perceiving Less Threat of HIV/AIDS Since Availability of Highly Active Antiretroviral Therapy: A Longitudinal Study.” *AIDS*. Vol. 18, No. 2, pp. 303-309.

Troy Suarez, Jeffrey Miller. (2001) “Negotiating Risks in Context: A Perspective on Unprotected Anal Intercourse and Barebacking among Men Who Have Sex with Men—Where Do We Go from Here?” *Archives of Sexual Behavior*. Vol. 30, No. 3, pp. 287-300.

One report from Amsterdam said that 55% of gay men admitted having unprotected anal sex in the last six months.

Staff Reporter. (2011) “In Amsterdam, Gay Men Have More Risky Sex.” *Reuters*. Jan. 27, 2011. [Link](#)

After a period during which homosexuals did not account for the majority of new HIV infections, this ratio has taken a sharp upward turn. This report describes the beginning of this trend:

Richard Wolitski, Ronald Valdiserri, Paul Denning, William Levine. (2001) “Are We Headed for a Resurgence of the HIV Epidemic among Men Who Have Sex with Men?” *American Journal of Public Health*. Vol. 91, No. 6, pp. 883-888.

Some people were told that treatment prevented transmission of the virus, but this was not true.

David Wilson, Matthew Law, Andrew Grulich, David Cooper, John Kaldor. (2008) “Relation Between HIV Viral Load and Infectiousness: A Model-Based Analysis.” *The Lancet*. Vol. 372, No. 9635, pp. 314-320.

45. “At the end of 2008...Most (75.0%) persons living with HIV were male, and 65.7% of the males were men who have sex with men (MSM).”

Lucia Torian, Mi Chen, Philip Rhodes, H. Irene Hall. (2011) “HIV Surveillance --- United States, 1981–2008.” *Morbidity and Mortality Weekly Report (MMWR)*. Vol. 60, No. 21, pp. 689-693. Centers for Disease Control and Prevention. Atlanta, GA.

Transmission via female-to-female contact is almost unheard of.

Lyle Petersen, Lynda Doll, Carol White, Susan Chu. (1992) “No Evidence for Female-to-Female HIV Transmission among 960,000 Female Blood Donors.” *Journal of Acquired Immune Deficiency Syndromes*. Vol. 5, No. 9, pp. 853-956.

A single case in 2003 was noteworthy enough to publish.

Helena Kwakwa, M. W. Ghobrial. (2003) “Female-to-Female Transmission of Human Immunodeficiency Virus.” *Clinical Infectious Diseases*. Vol. 36, No. 3, pp. e40-e41.

46. An estimated 87.3% acquire HIV exclusively through sex, not counting MSM with IV drug use (in which case the transmission method is unclear).

Centers for Disease Control and Prevention. (2011) “Diagnoses of HIV Infection and AIDS in the United States and Dependent Areas, 2009.” *HIV Surveillance Report*. Vol. 21.

Self-reported condom usage is not reliable.

Jonathan Zenilman, Carol Weisman, Anne Rompalo, Nancy Elish, Dawn Upchurch, Edward Hook III, David Celentano. (1995) “Condom Use to Prevent Incident STDs: The Validity of Self-Reported Condom Use.” *Sexually Transmitted Diseases*. Vol. 22, No. 1, pp. 15-21.

Condoms are much more effective at preventing HIV than infection rates could possibly account for, even if condoms were used most of the time.

King Holmes, Ruth Levine, Marcia Weaver. (2004) “Effectiveness of Condoms in Preventing Sexually Transmitted Infections.” *Bulletin of the World Health Organization*. Vol. 84, No. 6, pp. 454-461.

Owen Devine, Sevgi Aral. (2004) “The Impact of Inaccurate Reporting of Condom Use and Imperfect Diagnosis of Sexually Transmitted Disease Infection in Studies of Condom Effectiveness: A Simulation-Based Assessment.” *Sexually Transmitted Diseases*. Vol. 31, No. 10, pp. 588-595.

S.C. Weller, K. Davis-Beatty. (2002) “Condom Effectiveness in Reducing Heterosexual HIV Transmission.” *Cochrane Database of Systematic Reviews*. No. 1.

Despite an estimated 15,000 acts of intercourse, HIV was not transmitted between any of 124 serodiscordant couples who used condoms consistently for vaginal and anal sex. Among 121 serodiscordant couples who used

condoms inconsistently, 8 people infected their partners over the course of 20 months.

Isabelle De Vincenzi. (1994) “A Longitudinal Study of Human Immunodeficiency Virus Transmission by Heterosexual Partners.” *The New England Journal of Medicine*. Vol. 331, No. 6, pp. 341-346.

This study found that a condom was used in only one out of four acts of vaginal intercourse. Among singles, one out of three.

Debby Herbenick, Michael Reece, Vanessa Schick, Stephanie Sanders, Brian Dodge, J. Dennis Fortenberry. (2010) “Condom Use Rates in a National Probability Sample of Males and Females Ages 14 to 94 in the United States.” *The Journal of Sexual Medicine*. Vol. 7, Supplement 5, pp. 266-276.

Only one-half of sexually active teen males reported using a condom consistently with their most recent partner.

Jennifer Manlove, Erum Ikramullah, Elizabeth Terry-Humen. (2008) “Condom Use and Consistency among Male Adolescents in the United States” *Journal of Adolescent Health*. Vol. 43, No. 4, pp. 325-333.

47. “Slightly more than half of unintended pregnancies occur among women who were not using any method of contraception in the month they conceived, and more than four in 10 occur among women who used their method inconsistently or incorrectly. Only one in 20 are attributable to method failure.”

Jennifer Frost, Jacqueline Darroch, Lisa Remez. (2008) “Improving Contraceptive Use in the United States” In Brief. No. 1. Guttmacher Institute. Washington, DC.

48. The CDC reports HIV transmission in four categories: 53% male-to-male sexual contact, 31% high-risk heterosexual contact, 12% injection drug use, 4% male-to-male sexual contact and injection drug use. (All transmission via male-to-male sexual contact is classified as high-risk.)

Centers for Disease Control and Prevention. (2008) “Estimates of New HIV Infections in the United States” Centers for Disease Control and Prevention. Atlanta, GA.

Sex between men is inherently risky compared to heterosexual sex (and especially sex between women). HIV rates among men who have sex with men is much higher than the rest of the population.

“Gay, bisexual, and other men who have sex with men (MSM) represent approximately 2% of the US population, yet are the population most severely affected by HIV and are the only risk group in which new HIV infections have been increasing steadily since the early 1990s. In 2006, MSM accounted for more than half (53%) of all new HIV infections in the United States, and MSM with a history of injection drug use (MSM-IDU) accounted for an additional 4% of new infections. At the end of 2006, more than half (53%) of all people living with HIV in the United States were MSM or MSM-IDU. Since the beginning of the US epidemic, MSM have consistently

represented the largest percentage of persons diagnosed with AIDS and persons with an AIDS diagnosis who have died...In 2007, MSM were 44 to 86 times as likely to be diagnosed with HIV compared with other men, and 40 to 77 times as likely as women.”

Centers for Disease Control and Prevention. (2010) “HIV among Gay, Bisexual and Other Men Who Have Sex with Men (MSM).” Centers for Disease Control and Prevention. Atlanta, GA.

This risk is increased further when MSM engage in anal sex, as unprotected receptive anal sex is the behavior with the highest risk of HIV transmission.

M.L. Campsmith, E.B. Begley, G.V. Nakamura. (2004) “High-Risk Sexual Behavior by HIV-Positive Men Who Have Sex with Men --- 16 Sites, United States, 2000–2002.” *Morbidity and Mortality Weekly Report (MMWR)*. Vol. 53, No. 38, pp. 891-894. Centers for Disease Control and Prevention. Atlanta, GA.

In one study, over half of gay male couples were either in open relationships (47%) or in relationships in which one partner thought it was monogamous and the other did not (8%).

Colleen Hoff, Sean Beougher, Deepalika Chakravarty, Lynae Darbes, Torsten Neilands. (2010) “Relationship Characteristics and Motivations behind Agreements among Gay Male Couples: Differences by Agreement Type and Couple Serostatus.” *AIDS Care*. Vol. 22, No. 7, pp. 827-835.

Despite the risks, gay men do not get tested frequently enough. (No group does, for that matter, but it is particularly impactful due to the high infection rate among gay men.)

“A recent CDC study found that in 2008 one in five (19%) MSM in 21 major US cities were infected with HIV, and nearly half (44%) were unaware of their infection.”

Centers for Disease Control and Prevention. (2010) “HIV among Gay, Bisexual and Other Men Who Have Sex with Men (MSM).” Centers for Disease Control and Prevention. Atlanta, GA.

49. The previous youngest winner was Michael Jackson, posthumously awarded at what would have been age 51.
50. According to the Billboard Hot 100 Chart, Elvis Presley and Mariah Carey tie at 79 weeks each at number one.  
Fred Bronson. (2008) “Chart Beat.” *Billboard*. Apr. 10, 2008.
51. Ray Waddell. (2011). “Lady Gaga’s Monster Ball Tour Breaks Record for Debut Headlining Artist.” *Billboard*. May 5, 2011. [Link](#)
52. Wikipedia. “List of Highest-Grossing Concert Tours.” Jul. 13, 2011. [Link](#)
53. The youngest self-made female billionaire is Chu Lam Yiu, who passed the billion-dollar-mark at 38 in 2008.



Lurie Burkitt. (2008) “The World’s Youngest Women Billionaires.” *Forbes*. Jul. 24, 2008. [Link](#)

Staff Reporter. (2010) “China’s 7 Self-Made Female Billionaires.” *China Daily*. Mar. 23, 2010. [Link](#)

As of 2010, there were 14 self-made female billionaires worldwide. Three were American: Doris Fisher (78, co-founded Gap), Oprah Winfrey (57, television and publishing mogul), Meg Whitman (54, former eBay CEO).

Luisa Kroll. (2010) “The World’s Richest Self-Made Women.” *Forbes*. Jun. 14, 2010. [Link](#)

54. Note: Other female individuals on the list: Lyda Hill, self-made, female, but not a billionaire; Lynn Schusterman and Shelby White, not self-made.

Giving Pledge, LLC. (2011) “Directory [of Donors].” *GivingPledge.org*. Dec. 31, 2011. [Link](#)

55. No singer has become a billionaire to date. (The following is not the most authoritative source, but the data were confirmed in other sources. This is a complete compiled list that includes total wealth, not just current earnings.)

William Gish. (2010) “10 Richest Singers in the World.” Mar. 13, 2010. *Made Man*. [Link](#)

The only two women in entertainment to become billionaires are Oprah Winfrey and J.K. Rowling. The female singer with the largest fortune was Madonna with \$325 million.

Lea Goldman, Kiri Blakeley. (2007) “The 20 Richest Women in Entertainment.” *Forbes*. Jan. 18, 2007. [Link](#)

56. Cortney Harding. (2009) “Lady Gaga: The Billboard Cover Story.” *Billboard*. Aug. 7, 2009. [Link](#)

57. The Recording Academy. (2010) “Nominees and Winners.” [Link](#)

Chart rankings overview:

Wikipedia. (2011) “Poker Face (Lady Gaga song).” Jul. 10, 2011. [Link](#)

58. “Lady Gaga’s (USA) track ‘Poker Face’ spent a record 83 weeks on the US Hot Digital Songs chart in 2009/2010.”

Guinness World Records. (2010) “Track with Most Weeks on the US Hot Digital Songs Chart.” [Link](#)

59. Gil Kaufman. (2010) “Lady Gaga Lands in ‘Guinness World Records’ Book.” *MTV*. Sep. 16, 2010. [Link](#)

60. Samuel Axon. (2010) “Lady Gaga First Artist with One Billion Online Video Views.” *Mashable*. Mar. 24, 2010. [Link](#)

61. Liz Heron. (2010) “50 Most Popular Women on the Web, Per Google Search Results.” *ABC News*. May 6, 2010. [Link](#)

62. Guinness World Records. (2011) “Most followers on Twitter.” Jun. 29, 2011. [Link](#)
63. The most liked person at the time was Michael Jackson (posthumously).  
Daniel Macht. (2010) “Lady Gaga Most Popular Living Person on Facebook.” NBC New York. Jul 2, 2010. [Link](#)  
Staff Reporter. (2011) “Eminem Tops Lady Gaga in Facebook ‘Likes’.” MSNBC. Feb. 24, 2011. [Link](#)
64. Nekesa Mumbi Moody. (2011) “Lady Gaga Blitzes Market with Landmark Campaign for ‘Born This Way.’” Associated Press/MSNBC. May 25, 2011. [Link](#)  
Steve Jones. (2011) “Lady Gaga’s ‘Born This Way’ Delivers Huge Sales.” USA Today. Jun. 1, 2011. [Link](#)
65. FarmVille was the most popular game on Facebook between August 2009 and December 2010.  
Appdata. (2011) Custom report generated at: [Link](#)  
Adam Hadhazy. (2011) “CityVille Surpasses FarmVille as Most Popular Game on Facebook.” TechNewsDaily via MSNBC. Mar. 14, 2011. [Link](#)
66. Todd Wasserman. (2011) “Lady Gaga & Zynga Found ‘GagaVille’” CNN Tech via Mashable. May 11, 2011. [Link](#)
67. Tim Nudd. (2011) “Google Mashes Up Fan Videos for Lady Gaga Spot.” Adweek. May 23, 2011. [Link](#)
68. Steven Duchon. (2011) “Video: Lady Gaga Stars in Spectacle Performing ‘Born This Way’ on Saturday Night Live.” The Grand Rapids Press. May 22, 2011.
69. Lance Whitney. (2011) “Amazon Helps Lady Gaga Top 1 Million in Sales.” CNET. Jun. 1, 2011. [Link](#)
70. Marc Saltzman. (2011) “Born This Way Revenge: Play Through Lady Gaga’s Hits.” USA Today. Jun. 5, 2011. [Link](#)
71. Staff Reporter. (2011) “Starbucks Targets Younger Demo with Lady Gaga Scavenger Hunt.” Mobile Marketer. May 23, 2011. [Link](#)
72. Vaughn Schoonmaker. (2011) “Lady Gaga Greets Fans at Born This Way Promo.” MTV News. May 24, 2011. [Link](#)  
Matthew Perpetua. (2011) “Amazon, Best Buy Sell Lady Gaga’s Album at Deep Discount.” Rolling Stone. May 23, 2011. [Link](#)
73. Gary Trust. (2011) “Lady Gaga Claims 1,000th Hot 100 No. 1 with ‘Born This Way’” Billboard. Feb. 16, 2011. [Link](#)

Also: Nineteenth song to debut at number one and the largest opening week digital sales from a female artist (third overall).

74. Guinness World Records. (2011) “Fastest-Selling Single on iTunes.” Feb. 16, 2011. [Link](#)
75. Gil Kaufman. (2011) “Lady Gaga’s ‘Born This Way’ Is Fastest-Selling Single in iTunes History.” MTV News. Feb. 18, 2011. [Link](#)
76. Ben Sisario. (2011) “In Lady Gaga’s Album, Evidence of a New Order.” The New York Times. Jun. 1, 2011. [Link](#)
77. Kit Eaton. (2011) “As Buying and Storing Tunes Becomes Easier, Digital Album Sales Drive Music-Industry Growth” Fast Company. Jul. 7, 2011. [Link](#)
78. DoSomething.org. (2011) “Top 20 Celebs Gone Good for 2011.” Dec. 22, 2011. [Link](#)
- Terri Schwartz. (2011) “Lady Gaga, Justin Bieber Top ‘Celebs Gone Good.’” MTV. Dec. 27, 2011. [Link](#)
79. Emily Bazelon. (2012) “Lady Gaga, Anti-Bullying Crusader.” Slate. Mar. 1, 2012. [Link](#)
80. Gaga had stated she tested “borderline positive” for lupus and that it runs in her family.
- Sheila Marikar. (2010) “Lady Gaga Admits Testing ‘Borderline Positive’ for Lupus.” ABC News. Jun. 2, 2010. [Link](#)
- A celebrity reporter claimed that her lupus was far more serious than she let on.
- Nadia Mendoza. (2011) “‘Gaga Is Sick and Obsessed with Her Weight,’ Explosive New Book Accuses Singer of Drug Abuse and Starving Herself.” Daily Mail. Jul. 7, 2011. [Link](#)
81. Author’s Note: Originally set at Hazard Park, in the shadow of the LA County Hospital, but changed after concerns that performing near the hospital could interfere with emergency services.
82. M.S. Gottlieb, H.M. Schanker, P.T. Fan, A. Saxon, J.D. Weisman, I. Pozalski. (1981) “Pneumocystis Pneumonia- Los Angeles.” Morbidity and Mortality Weekly Report (MMWR). Vol. 30, No. 21, pp. 250-252. Centers for Disease Control and Prevention. Atlanta, GA.
- Maryn McKenna. (2004) “Beating Back the Devil.” Free Press. New York, NY. pp. 99-112.
83. There has been almost no change in the annual number of new HIV cases since 1991.
- H. Irene Hall, Ruiguang Song, Philip Rhodes, Joseph Prejean, Qian An, Lisa Lee, John Karon, Ron Brookmeyer, Edward Kaplan, Matthew McKenna, Robert Janssen. (2008) “Estimation of HIV Incidence in the United States.” Journal of the American Medical Association. Vol. 300, No. 5, pp. 520-529.
84. The percentage of Americans who rank HIV as a major health problem has declined steeply over the past decade.

Kaiser Family Foundation. “2009 Survey of Americans on HIV/AIDS: Summary of Findings on the Domestic Epidemic.” Apr. 2009.

85. Stuart Silverstein, Charles Ornstein. (2002) “Record Donation to UCLA.” Los Angeles Times. May 7, 2002. [Link](#)
86. Based on the CDC’s guidelines:  
Centers for Disease Control and Prevention. (2011) “HIV Testing Basics for Consumers.” Centers for Disease Control and Prevention. Atlanta, GA. [Link](#)
87. Alice Gomstyn, Jim Dubreuil. (2012) “Madonna Breaks Silence on Gaga ‘Born This Way’ Controversy; ‘20/20’ Exclusive Tonight.” ABC News. Jan. 13, 2012. [Link](#)  
Author’s Note: Such cooperation may be overly optimistic considering the extreme nature of some recent comments.
88. Staff Reporter. (2012) “Beastie Boys Co-Founder Adam Yauch Dead at 47.” Rolling Stone. May 4, 2012. [Link](#)
89. Based on a prediction by:  
Sonal Gandhi. (2010) “US Music Forecast, 2009 To 2014.” Forrester Research. Jan. 13, 2010. [Link](#)
90. City of New York. (2011) “Mayor Bloomberg, UN Secretary-General Ban Ki-Moon and Transportation Commissioner Sadik-Khan Announce New Traffic Safety Initiatives” Press Release PR-151-11. May 12, 2011. [Link](#)
91. Nekesa Mumbi Moody. (2011) “Lady Gaga Blitzes Market with Landmark Campaign for ‘Born This Way.’” Associated Press/MSNBC. May 25, 2011. [Link](#)
92. Brian Anthony Hernandez. (2011) “How Lady Gaga Created a Web Marketing Spectacle for Born This Way.” Mashable. May 24, 2011. [Link](#)
93. A case study that shows just how large a response an online creative contest can generate is Google’s 10<sup>100</sup> Project, which brought in an overwhelming 150,000 entries. [Link](#)
94. For reference, The Monster Ball Tour had 201 shows in 28 countries.
95. This was based on Justin Timberlake’s public respect for Gaga.  
“Okay, let’s talk about Lady Gaga for a minute. She’s a force. Beyond awesome. I mean, she’s legitimately talented...If I were Lady Gaga, I’d do whatever I wanted, which it looks like she’s doing. She’s just plain old good.”  
David Hochman. (2011) “Playboy Interview: Justin Timberlake.” Playboy. Jun. 13, 2011. [Link](#)
96. Timberlake’s actual return to music came with his January 2013 release of the single “Suit & Tie.”
97. Staff Reporter. (2009) “The 100 Best Singles of 2008.” Rolling Stone. Dec. 25, 2008.

98. It was at the top of the charts for four weeks total, but technically Gaga’s song interrupted a run of three consecutive weeks, as the week after “Single Ladies” first hit number one, it was interrupted for a week by “Live Your Life” by T.I. feat. Rihanna.
- “Single Ladies” was number one on the Hot 100 for the week of Jan. 10, 2009, followed by “Just Dance” the week of Jan. 17, 2009.
- Billboard. (2011) “Hot 100.” Jan. 10, 2009. [Link](#)
- Billboard. (2011) “Hot 100.” Jan. 17, 2009. [Link](#)
99. #2: “In This Skin” (2004), #4: “Do You Know” (2008), #5: “A Public Affair” (2006), #6: “Irresistible” (2001).
- Billboard. (2011) “Jessica Simpson: Chart History, Billboard 200.” [Link](#)
100. Staff Reporter. (2011) “Big Hair from Billion-Dollar Woman Jessica Simpson as She Reveals How She Climbed to the Top of Fashion World.” Daily Mail. Feb. 16, 2011. [Link](#)
101. Simpson said: “Of all the things about myself, staying a virgin until my wedding night is the thing that makes me most proud.”
- Staff Reporter. (2004) “Not Such a Dumb Blonde?” The Sunday Times. Jun. 27, 2004. [Link](#)
102. Jessica Simpson’s last entry on Billboard’s Radio Songs Chart was “Take My Breath Away” in 2006.
- Billboard. (2011) “Jessica Simpson: Chart History, Radio Songs.” [Link](#)
- “My show is the only reason right now why I have sales on my album,’ she admits. ‘I don’t even have a song on the radio.”
- Jennifer Vineyard. (2003) “Jessica Simpson – The Innocent.” MTV News. Nov. 21, 2003. [Link](#)
103. Miguel de Cervantes Saavedra (Author), Edith Grossman (Translator). (2003) “Don Quixote.” HarperCollins. New York, NY. p. 486.
104. 12.6% of people in the US in are black/African American.
- US Census Bureau. (2011) “Overview of Race and Hispanic Origin: 2010.” US Department of Commerce, Economics and Statistics Administration. Washington, DC.
- 56% of people who died in 2007 from AIDS were black/African American.
- Jiaquan Xu, Kenneth Kochanek, Sherry Murphy, Betzaida Tejada-Vera. (2010) “Deaths: Final Data for 2007.” National Vital Statistics Reports. Vol. 58, No. 19, pp. 1-136.
- Paul Denning, Elizabeth DiNenno. (2010) “Communities in Crisis: Is There a Generalized HIV Epidemic in Impoverished Urban Areas of the United States?” Centers for Disease Control and Prevention. Atlanta, GA.
- AIDS diagnoses data from:

Centers for Disease Control and Prevention. (2007) “Cases of HIV infection and AIDS in the United States and Dependent Areas, 2005.” HIV/AIDS Surveillance Report. Vol. 17, Revised Edition. Centers for Disease Control and Prevention. Atlanta, GA.

105. “Data from several studies overwhelmingly supported the assertion that Black MSM are less likely than White MSM to identify as gay.”  
Gregorio Millett, John Peterson, Richard Wolitski, Ron Stall. (2006) “Greater Risk for HIV Infection of Black Men Who Have Sex with Men: A Critical Literature Review.” American Journal of Public Health. Vol. 96, No. 6, pp. 1007-1019.
106. Centers for Disease Control and Prevention. (2010) “HIV and AIDS among Gay and Bisexual Men.” Centers for Disease Control and Prevention. Atlanta, GA.
107. Benoit Denizet-Lewis. (2003) “Double Lives on the Down Low.” The New York Times Magazine. Aug. 3, 2003. [Link](#)
108. This theory is almost impossible to study, let alone prove, due to people not identifying as gay or bisexual and/or lying about sexual activity.  
David Malebranche. (2008) “Bisexually Active Black Men in the United States and HIV: Acknowledging More than the ‘Down Low.’” Archives of Sexual Behavior. Vol. 37, No. 5, pp. 810-816.  
For a review of 12 theories about why the HIV rates for black MSM are so high, read:  
Gregorio Millett, John Peterson, Richard Wolitski, Ron Stall. (2006) “Greater Risk for HIV Infection of Black Men Who Have Sex with Men: A Critical Literature Review.” American Journal of Public Health. Vol. 96, No. 6, pp. 1007-1019.  
In it, the described behavior is confirmed, but not linked to the higher rates of HIV. However, it was still a widely held belief among the public after it made headlines in popular media. Emerging theories explain the phenomenon as being related to the emphasis on masculinity in black culture, as well as the misguided perception that the more masculine a man is, the less likely he is to have HIV; these theories are still being explored for validity.
109. Staff Reporter. (2005) “Kanye West Calls for End to Gay Bashing.” USA Today. Aug. 18, 2005. [Link](#)
110. Staff Reporter. (2005) “Star Says Rap is ‘Too Homophobic.’” BBC News. Aug. 19, 2005. [Link](#)
111. Caveat: At the end, Eminem’s character convinces Dr. Dre’s to give in, telling the man to kill his cheating wife and her lover.
112. James Montgomery. (2009) “Eminem Is the Best-Selling Artist of the Decade.” MTV. Dec. 8, 2009. [Link](#)
113. Among other things, Eminem credits Elton John for his sobriety.

Vanessa Thorpe. (2010) “Elton John Tells How He Helped Eminem Quit Drugs.” *The Observer*. Jan. 3, 2010. [Link](#)

Eric Ditzian. (2011) “Eminem Talks about His Friendship with Elton John.” *MTV*. Jan. 4, 2010. [Link](#)

114. Major stars, Elton John in particular, have been constantly defending Eminem for over a decade.

Eric Schumacher-Rasmussen. (2001) “Madonna, Elton, Stevie Wonder Defend Eminem.” *MTV*. Feb. 21, 2001. [Link](#)

Roman Wolfe. (2011) “Sir Elton John Defends Rap Music; Blasts the United States.” *AllHipHop*. Jan. 26, 2011. [Link](#)

Lynn Barker. (2011) “Elton John on Rappers and Garden Gnomes.” *TeenMusic*. Jan. 25, 2011. [Link](#)

115. In “A Kiss,” a song from “Hell: The Sequel,” a collaborative album with Royce da 5’9”, Eminem raps: “Tell Lady Gaga she can quit her job at the post office / She’s still a male lady ... Wouldn’t f-ck her with her d-ck / You heard it / The verdict’s in.”

A few days after the track was leaked, in an interview with Allison Hagedorf, Eminem played it off as a joke and said: “Lady Gaga, as an artist...she’s undeniable...she’s dope, she’s an incredible talent.”

Fuse Networks. (2011) “Bad Meets Evil: Lady Gaga – Bonnaroo 2011.” *Fuse.tv*. Jun. 11, 2011. [Link](#)

116. David Auerbach, William Darrow, Harold Jaffe, James Curran. (1984) “Cluster of Cases of the Acquired Immune Deficiency Syndrome: Patients Linked by Sexual Contact.” *The American Journal of Medicine*. Vol. 76, No. 3, pp. 487-492.

It was later found that the virus moved from Africa to America earlier, most likely via Haiti (however, research suggests Dugas was one of a handful of men who played a key role in the sudden rapidity of the disease’s spread in the US).

Thomas Gilbert, Andrew Rambaut, Gabriela Wlasiuk, Thomas Spira, Arthur Pitchenik, Michael Worobey. (2007) “The Emergence of HIV/AIDS in the Americas and Beyond.” *Proceedings of the National Academy of Sciences*. Vol. 104, No. 47. pp. 18566-18570.

Carla Kuiken, Rama Thakallapalli, Anne Eskild, Anthony de Ronde. (2000) “Genetic Analysis Reveals Epidemiologic Patterns in the Spread of Human Immunodeficiency Virus.” *American Journal of Epidemiology*. Vol. 152, No. 9, pp. 814-822.

117. Feifei Sun. (2011) “Lady Gaga Designs Wristband for Japan Earthquake Relief.” *Time*. Mar. 13, 2011. [Link](#)

118. Benji Wilson. (2010) “Lady Gaga Gets Lippy: The Pop Star Teams with Mac to Raise Aids Awareness.” *Daily Mail*. Apr. 10, 2010. [Link](#)

119. Harvey Frommer. (2007) “Five o’Clock Lightning: Babe Ruth, Lou Gehrig, and the Greatest Baseball Team in History, the 1927 New York Yankees.” John Wiley & Sons. Hoboken, NJ.
120. Wilt Chamberlain claimed to have slept with 20,000 women.  
Wilt Chamberlain. (1992) “A View from Above.” Signet. New York, NY.
121. “...Johnson admitted he had been sleeping with three hundred to five hundred people a year.”  
Roland Lazenby. (2010) “Jerry West: The Life and Legend of a Basketball Icon.” ESPN Books. New York, NY. p. 376.
122. Lisa DePaulo, Kyla Jones. (2006) “The Days and Nights of an NBA Groupie.” GQ. Jul. 2006. [Link](#)
123. Journal of Blacks in Higher Education. (2006) “The False Promise of Basketball as the Best Route out of Inner-City Poverty for Young Blacks.” No. 47. Spring 2006.
124. 53% of American high school juniors have had sex.  
Danice Eaton, Laura Kann, Steve Kinchen, Shari Shanklin, James Ross, Joseph Hawkins, William Harris, Richard Lowry, Tim McManus, David Chyen, Connie Lim, Lisa Whittle, Nancy Brener, Howell Wechsler. (2010) “Youth Risk Behavior Surveillance — United States, 2009.” Morbidity and Mortality Weekly Report (MMWR). Vol. 59, No. SS-5, pp. 1-142. Centers for Disease Control and Prevention. Atlanta, GA.
125. Suzanne Ryan, Jennifer Manlove, Kerry Franzetta. (2003) “The First Time: Characteristics of Teens’ First Sexual Relationships.” Research Brief. Vol. 16, No. 1, pp. 1-8. Child Trends. Washington, DC.
126. Average age of first intercourse for both sexes is 17.  
Anjani Chandra, Gladys Martinez, William Mosher, Joyce Abma, Jo Jones. (2005) “Fertility, Family Planning, and Reproductive Health of U.S. Women: Data from the 2002 National Survey of Family Growth.” Vital and Health Statistics. Vol. 23, No. 25, pp. 1-180.  
Gladys Martinez, Anjani Chandra, Joyce Abma, Jo Jones, William Mosher. (2006) “Fertility, Contraception, and Fatherhood: Data on Men and Women from Cycle 6 (2002) of the 2002 National Survey of Family Growth.” Vital and Health Statistics. Vol. 23, No. 26, pp. 1-142.
- These figures agree with the CDC’s findings, which organized results by grade level, rather than specific age.  
Danice Eaton, Laura Kann, Steve Kinchen, Shari Shanklin, James Ross, Joseph Hawkins, William Harris, Richard Lowry, Tim McManus, David Chyen, Connie Lim, Lisa Whittle, Nancy Brener, Howell Wechsler. (2010) “Youth Risk Behavior Surveillance — United States, 2009.” Morbidity and Mortality Weekly Report (MMWR). Vol. 59, No. SS-5, pp. 1-142. Centers for Disease Control and Prevention. Atlanta, GA.



127. Chris Chapman, Jennifer Laird, Angelina KewalRamani. (2010) “Trends in High School Dropout and Completion Rates in the United States: 1972–2008.” US Department of Education, National Center for Education Statistics. Washington, DC.
128. This was true not only in practice, but also in perception. In 2010, 78% of those 15-19 years old agreed with the statement, “Most high school-age teens have had sex.”  
Bill Albert. (2010) “With One Voice 2010: America’s Adults and Teens Sound Off about Teen Pregnancy.” The National Campaign to Prevent Teen and Unplanned Pregnancy. Washington, DC.
129. Changing the norm for high school behavior, even a small amount, would have a profound impact, as it is central to what motivates behavior, particularly during adolescence.  
Douglas Kirby. (2001) “Understanding What Works and What Doesn’t in Reducing Adolescent Sexual Risk-Taking.” Family Planning Perspectives. Vol. 33, No. 6, pp. 276-281.
130. Research concludes that men typically over-report and women typically under-report the total number of opposite-sex partners because they choose different strategies for counting sexual partners (guided by differing social attitudes toward men and women with many partners). When using the same strategy, both sexes report similar numbers.  
Norman Brown, Robert Sinclair. (1999) “Estimating Number of Lifetime Sexual Partners: Men and Women Do It Differently.” The Journal of Sex Research. Vol. 36, No. 3, pp. 292-297.  
Michael Wiederman. (1997) “The Truth Must Be in Here Somewhere: Examining the Gender Discrepancy in Self-Reported Lifetime Number of Sex Partners.” The Journal of Sex Research. Vol. 34, No. 4, pp. 375-386.
131. Centers for Disease Control and Prevention. (2009) “2009 Sexually Transmitted Diseases Surveillance: Syphilis.” Centers for Disease Control and Prevention. Atlanta, GA.
132. Prior to the more recent low levels of syphilis, scientists in the 1950s and 1960s thought it could be eradicated then as well.  
Staff Reporter. “Medicine: Resurgent Syphilis: It Can Be Eradicated.” Time. Sep. 21, 1962. [Link](#)
133. FourSquare already introduced an STD testing badge.  
Tyler Gray. (2011) “Foursquare on What the Hell It Was Thinking with an STD Test Badge.” Wired. May 12, 2011. [Link](#)
134. Centers for Disease Control and Prevention. (2011) “HIV Testing Basics for Consumers.” Centers for Disease Control and Prevention. Atlanta, GA. [Link](#)
135. “...an RNA test with 50 copies/ml sensitivity would detect HIV infection approximately 7 days before a p24 antigen test, and 12 days before a sensitive anti-HIV test.”

Eberhard Fiebig, David Wright, Bhupat Rawal, Patricia Garrett, Richard Schumacher, Lorrainef Peddada, Charles Heldebrant, Richard Smith, Andrew Conrad, Steven Kleinman, Michael Busch. (2003) “Dynamics of HIV Viremia and Antibody Seroconversion in Plasma Donors: Implications for Diagnosis and Staging of Primary HIV Infection.” *AIDS*. Vol. 17, No. 13, pp. 1871-1879.

136. Susan Stramer, Simone Glynn, Steven Kleinman, Michael Strong, Sally Caglioti, David Wright, Roger Dodd, Michael Busch. (2004) “Detection of HIV-1 and HCV Infections among Antibody-Negative Blood Donors by Nucleic Acid–Amplification Testing.” *New England Journal of Medicine*. Vol. 351, No. 8, pp. 760-768.

137. In 2011, three sample testing services had costs between \$175 and \$249 for nucleic acid HIV tests.

\$199: STD Test Express. (2011) “Test Center Locations & Pricing.” [Link](#)

\$175: STDAAlert.com. (2011) “Test Packages & Prices.” [Link](#)

\$249: tSTD Services Group Inc. (2011) “Order Your Testing.” [Link](#)

138. In fact, the amount of dating activity was the most predictive behavioral factor, and the second-highest predictive factor overall.

Suzanne Ryan, Kerry Franzetta, Jennifer Manlove, Emily Holcombe. (2007) “Adolescents’ Discussions about Contraception or STDs with Partners before First Sex.” *Perspectives on Sexual and Reproductive Health*. Vol. 39, No. 3, pp. 149-157.

Description of dating activities:

Suzanne Ryan, Kerry Franzetta, Jennifer Manlove. (2003) “Characteristics of Teens’ First Sexual Partner.” *Science Says*. No. 5. Child Trends/The National Campaign to Prevent Teen Pregnancy. Washington, DC.

139. Jennifer Manlove, Suzanne Ryan, Kerry Franzetta. (2004) “Contraceptive Use and Consistency in U.S. Teenagers’ Most Recent Sexual Relationships.” *Perspectives on Sexual and Reproductive Health*. Vol. 36, No. 6, pp. 265-275.

140. Jennifer Manlove, Suzanne Ryan, Kerry Franzetta. (2003) “Patterns of Contraceptive Use within Teenagers’ First Sexual Relationships.” *Perspectives on Sexual and Reproductive Health*. Vol. 35, No. 6, pp. 246-255.

141. Susan Harlap, Kathryn Kost, Jacqueline Darroch Forrest. (1991) “Preventing Pregnancy, Protecting Health: A New Look at Birth Control Choices in the United States.” *Guttman Institute*. New York, NY.

142. The percentage of sexually active students who used a condom during last sexual intercourse increased between 1991 and 2003 (46.2%–63.0%). It then fell slightly between 2003 and 2009 (63.0%–61.1%).

Danice Eaton, Laura Kann, Steve Kinchen, Shari Shanklin, James Ross, Joseph Hawkins, William Harris, Richard Lowry, Tim McManus, David Chyen, Connie Lim, Lisa Whittle, Nancy Brener, Howell Wechsler. (2010) “Youth Risk Behavior Surveillance — United States, 2009.” *Morbidity and*

Mortality Weekly Report (MMWR). Vol. 59, No. SS-5, pp. 1-142. Centers for Disease Control and Prevention. Atlanta, GA.

143. “Teens in the United States and European teens have similar levels of sexual activity. However, the latter are more likely to use contraceptives and to use effective contraceptive methods; they therefore have substantially lower pregnancy rates.”  
John Santelli, Theo Sandfort, Mark Orr. (2008) “Transnational Comparisons of Adolescent Contraceptive Use: What Can We Learn from These Comparisons?” Archives of Pediatric Adolescent Medicine. Vol. 162, No. 1, pp. 92-94.
144. Sarah Brown, Leon Eisenberg. (1995) “The Best Intentions: Unintended Pregnancy and the Well-Being of Children and Families.” National Academy Press. Washington, DC.
145. It would logically follow that the abortion rate would drop much further than the total pregnancy rate, as the latter includes both intended and unintended pregnancies, but the effects of the Three Month Rule would only affect unintended pregnancies.
146. John Donohue, Steven Levitt. (2001) “The Impact of Legalized Abortion on Crime.” Quarterly Journal of Economics. Vol. 116, No. 2, pp. 379-420.
147. Steven Levitt, Stephen Dubner. (2005) “Freakonomics: A Rogue Economist Explores the Hidden Side of Everything.” HarperCollins. New York, NY.
148. Hans Forssman, Inga Thuwe. (1966) “One Hundred and Twenty Children Born after Application for Therapeutic Abortion Refused.” Acta Psychiatrica Scandinavica. Vol. 41, No. 1, pp. 71-78.
149. Caveat: Some prominent conservatives do agree with the premise of the idea, even if they oppose abortion. Ann Coulter, for example, has said “the leading cause of all social pathologies is single motherhood” and “various studies have shown that children raised by a single mother comprise about 70 percent of juvenile murderers, delinquents, teenaged mothers, drug abusers, dropouts, suicides and runaways.” (She strongly advocates adoption.)  
Ann Coulter. (2011) “Casey Anthony: Single Mother of the Year!” AnnCoulter.com. Jul. 6, 2011. [Link](#)
150. John Lott. (2007) “Freedomomics: Why the Free Market Works and Other Half-Baked Theories Don’t.” Regnery Publishing. Washington, DC.
151. Shankar Vedantam. (2007) “Research Links Lead Exposure, Criminal Activity.” The Washington Post. Jul. 8, 2007. [Link](#)
152. Lawrence Finer, Stanley Henshaw. (2006) “Disparities in Rates of Unintended Pregnancy in the United States, 1994 and 2001.” Vol. 38, No. 2, pp. 90-96.  
Rachel Jones, Kathryn Kooistra. (2008) “Abortion Incidence and Access to Services in the United States, 2008.” Perspectives on Sexual and Reproductive Health. Vol. 43, No. 1, pp. 41-50.

153. Calculation based on roughly 44% of unintended pregnancies resulting in birth.

Lawrence Finer, Stanley Henshaw. (2006) “Disparities in Rates of Unintended Pregnancy in the United States, 1994 and 2001.” Vol. 38, No. 2, pp. 90-96.

It is also based on a conservative estimate of 80% of intended pregnancies resulting in a birth, with a fetal loss rate inflated from the national average due to an unknown number of abortions preempting miscarriages that would have happened, as well as the small number of intended pregnancies that end in abortion.

Stephanie Ventura, William Mosher, Sally Curtin, Joyce Abma, Stanley Henshaw. (1999) “Highlights of Trends in Pregnancies and Pregnancy Rates by Outcome: Estimates for the United States, 1976–96.” National Vital Statistics Reports. Vol. 47, No. 29, pp. 1-10.

Based on these rates, every ten unintended pregnancies avoided would result in 4.4 fewer children, while every eight additional intended pregnancies would result in 6.4 more children, a net positive of two children despite a 20% lower overall pregnancy rate.

154. Lawrence Finer, Stanley Henshaw. (2006) “Disparities in Rates of Unintended Pregnancy in the United States, 1994 and 2001.” Vol. 38, No. 2, pp. 90-96.
155. Susheela Singh, Gilda Sedgh, Rubina Hussain. (2010) “Unintended Pregnancy: Worldwide Levels, Trends, and Outcomes.” Studies in Family Planning. Vol. 41, No. 4, pp. 241-250.
156. Haya El Nasser, Paul Overberg. (2011) “U.S. Population Growth Slowed, Still Envied.” USA Today. Jan. 6, 2011. [Link](#)
157. Bernard Guyer, Mary Anne Freedman, Donna Strobino, Edward Sondik. (2000) “Annual Summary of Vital Statistics: Trends in the Health of Americans during the 20th Century.” Pediatrics. Vol. 106, No. 6, pp. 1307-1317.
158. Haya El Nasser, Paul Overberg. (2011) “U.S. Population Growth Slowed, Still Envied.” USA Today. Jan. 6, 2011. [Link](#)
159. Rob Stein. (2007) “U.S. Fertility Rate Hits 35-Year High, Stabilizing Population.” The Washington Post. Dec. 21, 2007. [Link](#)
160. “The broad-based decline in births and fertility rates from 2007 through 2009 is now well-documented.”  
Paul Sutton, Brady Hamilton. (2011) “Recent Trends in Births and Fertility Rates through 2010.” Centers for Disease Control and Prevention. Atlanta, GA. [Link](#)
161. The pregnancy rate for married women in 1995 was 113 per 1,000, 18 percent higher than for unmarried women at 96 per 1,000. The birth rate for married women was 84 per 1,000; their abortion rate was 9 per 1,000 in 1995.

Stephanie Ventura, William Mosher, Sally Curtin, Joyce Abma, Stanley Henshaw. (1999) "Highlights of Trends in Pregnancies and Pregnancy Rates by Outcome: Estimates for the United States, 1976–96." National Vital Statistics Reports. Vol. 47, No. 29, pp. 1-10.

162. For the first time in the history of the Census, in 2010 married couples no longer made up the majority of U.S. households. Between 2000 and 2010, married couple households dropped from 52% to 48%. By comparison, in 1950, three-quarters of households were headed by married couples. The number of married adults dropped from 57.3% to 54.1%.

Traditional nuclear families with children are also becoming less common. The number of households headed by a married couple with children under 18 dropped from 24 to 21 percent from 2000 to 2010, and 2010 was the first time over a third of children under 18 were living with a single parent.

Overall household size shrank, except notably among the less educated. The average size of households headed by those who did not graduate high school increased from 2.67 to 2.87 to between 2001 and 2010.

Cohabiting couples grew by 13% in a single year, up to 7.5 million in 2010. In the 1960s, the median age at first marriage for men and women was 23 and 20, respectively. In 2010: 28 and 26.

U.S. Census Bureau. (2011) "America's Families and Living Arrangements: 2010." Housing and Household Economic Statistics Division, Fertility & Family Statistics Branch. Washington, DC.

Attitudes have changed as well. 39% say marriage is becoming obsolete, and 80% say an unmarried couple living together with a child is a family.

Pew Research Center. (2010) "The Decline of Marriage and Rise of New Families." Pew Research Center. Washington, DC.

163. More cynical behavioral economists would attribute the increase in marriage to market friction and irrational escalation (a.k.a. "in for a penny, in for a pound").
164. Bill Albert. (2010) "With One Voice 2010: America's Adults and Teens Sound Off about Teen Pregnancy." The National Campaign to Prevent Teen and Unplanned Pregnancy. Washington, DC.
165. Despite so many regretting sex now, these lower rates are possible. Dutch teens have long since been initiating sex at the same age as Americans, but they experience far lower regret (along with lower pregnancy and STDs.)

T. Vogels, R. van der Vliet. (1990) "Jeugd en Seks. Gedrag en Gezondheidsrisico's bij Scholieren." SDU Publishers. Den Haag, Netherlands.

A more recent article claims only 5 percent of boys and 12 percent of girls in the Netherlands regret their first time having sex.

Rachael Phelps. (2010) "Dream Team: The European Approach to Teens, Sex, and Love, in Pictures." Slate. Oct. 28, 2010. [Link](#)

166. Those who waited until they were older to have sex report more pleasure and less regret, guilt, and anxiety.
- Jennifer Walsh, L. Monique Ward, Allison Caruthers, Ann Merriwether. (2011) "Awkward or Amazing: Gender and Age Trends in First Intercourse Experiences." *Psychology of Women Quarterly*. Vol. 35, No. 1, pp. 59-71.
- Daniel Wight, Alison Parkes, Vicki Strange, Elizabeth Allen, Chris Bonell, Marion Henderson. (2008). "The Quality of Young People's Heterosexual Relationships: A Longitudinal Analysis of Characteristics Shaping Subjective Experience." *Perspectives on Sexual and Reproductive Health*. Vol. 40, No. 4, pp. 226-237.
- Susan Sprecher, Anita Barbee, Pepper Schwartz. (1995). "'Was It Good for You Too?' Gender Differences in First Sexual Intercourse Experiences." *Journal of Sex Research*. Vol. 32, No. 1, pp. 3-15.
167. People who wait longer are more likely to use contraceptives the first time they have sex.
- Jennifer Manlove, Suzanne Ryan, Kerry Franzetta. (2003) "Patterns of Contraceptive Use within Teenagers' First Sexual Relationships." *Perspectives on Sexual and Reproductive Health*. Vol. 35, No. 6, pp. 246-255.
168. Long-term, monogamous relationships are reported to be more satisfying, both physically and emotionally.
- Edward Laumann, John Gagnon, Robert Michael, Stuart Michaels. (1994) "The Social Organization of Sexuality: Sexual Practices in the United States." University of Chicago Press. Chicago, IL.
169. Kaye Wellings, Martine Collumbien, Emma Slaymaker, Susheela Singh, Zoé Hodges, Dhaval Patel, Nathalie Bajos. (2006) "Sexual Behaviour in Context: A Global Perspective." *The Lancet*. Vol. 368, No. 9548, pp. 1706-1728.
170. Linda Waite, Kara Joyner. (2001) "Emotional Satisfaction and Physical Pleasure in Sexual Unions: Time Horizon, Sexual Behavior, and Sexual Exclusivity." *Journal of Marriage and Family*. Vol. 63, No. 1, 247-264.
- Christopher Scott, Susan Sprecher. (2000) "Sexuality in Marriage, Dating, and Other Relationships: A Decade Review." *Journal of Marriage and Family*. Vol. 62, No. 4, pp. 999-1017.
- Edward Laumann, Anthony Paik, Raymond Rosen. (1999) "Sexual Dysfunction in the United States: Prevalence and Predictors." *The Journal of the American Medical Association*. Vol. 281, No. 6, pp. 537-544.
171. David Myers. (2000) "The Funds, Friends, and Faith of Happy People." *American Psychologist*. Vol. 55, No. 1, pp. 56-67.
172. Alois Stutzer, Bruno Frey. (2006) "Does Marriage Make People Happy, or Do Happy People Get Married?" *Journal of Socio-Economics*. Vol. 35, No. 2, pp. 326-347.
173. One of the most comprehensive meta-analyses available, this source presents 7,837 correlational findings from 603 studies in 69 nations between 1911 and

1994, and is available in a manipulable database format. Sexual satisfaction is a consistently high predictor of happiness. Interestingly, an internal locus of control is also one of the more consistent correlates of happiness – something that waiting exercises.

Ruut Veenhoven. (1994). “World Database of Happiness: Correlates of Happiness.” Erasmus University Rotterdam. Rotterdam, Netherlands.

- 174. Christopher Swanson. (2010) “U.S. Graduation Rate Continues Decline.” Education Week. Jun, 10, 2010. [Link](#)
- 175. Robert Cairns, Beverley Cairns, Holly Neckerman. (1989) “Early School Dropout: Configurations and Determinants” *Child Development*. Vol. 60, No. 6, pp. 1437-1452.
- 176. Clive Belfield, Henry Levin. (2007) “The Price We Pay: Economic and Social Consequences of Inadequate Education.” Brookings Institution. Washington, DC.

Thirty-five years earlier, one of the authors also wrote one of the most oft-cited reports in this field.

Henry Levin. (1972). “The Costs to the Nation of Inadequate Education.” Findings presented to U.S. Senate, Select Committee on Equal Educational Opportunity. Government Printing Office. Washington, DC.

- 177. There are many other researchers who support this idea; however, this paper addresses many of the problems with other research, namely controlling for variables to reveal the actual effect of abstinence.

Robert Rector, Kirk Johnson. (2005) “Teenage Sexual Abstinence and Academic Achievement.” Paper presented at the Abstinence Clearinghouse Conference, Aug. 2005. The Heritage Foundation. Washington, DC.

- 178. Jennifer Cheeseman Day, Eric Newburger. (2002) “The Big Payoff: Educational Attainment and Synthetic Estimates of Work-Life Earnings.” Current Population Reports. US Census Bureau. Washington, DC.
- 179. These relationships are extremely well documented. One recent (albeit overtly biased toward marriage) book that examines much of this research is:

Linda Waite, Maggie Gallagher. (2000) “The Case for Marriage: Why Married People Are Happier, Healthier, and Better Off Financially.” Doubleday. New York, NY.

Researchers have also found people in long-term, committed relationships to have interpersonal dynamics virtually identical to married couples and similar advantages over unattached people, particularly sexual satisfaction. The key elements appear to be the length and stability of relationships.

Laura Stafford, Susan Kline, Caroline Rankin. (2004) “Married Individuals, Cohabitors, and Cohabitors Who Marry: A Longitudinal Study of Relational and Individual Well-Being.” *Journal of Social and Personal Relationships*. Vol. 21, No. 2, pp. 231-248.

Willy Pedersen, Morten Blekesaune. (2003) “Sexual Satisfaction in Young Adulthood: Cohabitation, Committed Dating or Unattached Life?” *Acta Sociologica*. Vol. 46, No. 3, pp. 179-193.

180. John Todd. (1835) “The Student’s Manual: Designed, by Specific Directions, to Aid in Forming and Strengthening the Intellectual and Moral Character and Habits of the Student.” J.H. Butler. Northampton, MA.

To get an idea of how repressed the culture was at the time (a fairly recent trend, in the history of the world), Todd gave these warnings in Latin, since he could not bear to do so in English. Before the passage, he declares:

“While I thus briefly allude to these wanderings of the imagination, by which the mind is debilitated, the soul polluted by a stain which tears cannot wash out, nor the deepest repentance cannot fully do away, I cannot satisfy my conscience without going a step further, and saying what others have, to my certain knowledge, wished to say, and ought to say, but which no one has yet had the courage to say, in tones loud and distinct ... I have chosen to risk the charge of pedantry rather than not say what I could not say in English.”

He also warned of “bad books” and was no fan of Lord Byron:

“I believe a single page may be selected from Byron, which has done more to hurt the mind and heart of the young man than all his writings have ever done good. But he will quickly pass from notice, and is doomed to be exiled from the libraries of all virtuous men.”

The entire work is interesting and gives insight into the mindset of the period, particularly attitudes toward women. This manual was incredibly popular at the time and was reprinted 21 times.

Available from Google Books: [Link](#)

181. Eugène Brieux, Harry Pollard. (1914) “Damaged Goods.” Mutual Film Corporation. Edendale, CA.
182. Katie Johnson. (2003) “Damaged Goods: Sex Hysteria and the Prostitute Fatale.” *Theatre Survey*. Vol. 44, No. 1, pp. 43-67.
183. Jacqueline Darroch, David Landry, Susheela Singh. (2000) “Changing Emphases in Sexuality Education In U.S. Public Secondary Schools, 1988-1999.” *Family Planning Perspectives*. Vol. 32, No. 6, pp. 204-212.
184. Sexuality Information and Education Council of the United States. (2011) “Dedicated Federal Abstinence-only-until-Marriage Funding by Year. (1982–2010).” SEICUS. Washington, DC.
185. Summary based on federal definition of abstinence-only education. (The first two sentences address items A-F; G is about drugs and alcohol, and H is about self-sufficiency.)  
U.S. Social Security Act, §510(b)(2).
186. Cynthia Dalliard. (2002) “Abstinence Promotion and Teen Family Planning: The Misguided Drive for Equal Funding.” *Guttmacher Report on Public Policy*. Vol. 5, pp. 1-3. Guttmacher Institute. Washington, DC.



187. The total number fluctuated over the years. As of Aug. 2008, 25 states had refused the funds.

Mailman School of Public Health. (2008) “Accuracy, Efficacy, and Ethics of Abstinence-Only Programs Questioned by Public Health Experts.” Sep. 19, 2008. Columbia University. New York, NY. [Link](#)

188. 53% of American high school juniors have had sex.

Danice Eaton, Laura Kann, Steve Kinchen, Shari Shanklin, James Ross, Joseph Hawkins, William Harris, Richard Lowry, Tim McManus, David Chyen, Connie Lim, Lisa Whittle, Nancy Brener, Howell Wechsler. (2010) “Youth Risk Behavior Surveillance — United States, 2009.” Morbidity and Mortality Weekly Report (MMWR). Vol. 59, No. SS-5, pp. 1-142. Centers for Disease Control and Prevention. Atlanta, GA.

189. Lawrence Finer. (2007) “Trends in Premarital Sex in the United States, 1954–2003.” Public Health Reports. Vol. 122, No. 1, pp. 73-78.

190. A concise criticism of the panic over AIDS:

Brendan O’Neill. (2008) “The Exploitation of AIDS.” The Guardian. Jun. 12, 2008. [Link](#)

191. Joy Burnham. (2005) “Fears of Children in the United States: An Examination of the American Fear Survey Schedule with 20 New Contemporary Fear items.” Measurement and Evaluation in Counseling and Development. Vol. 38, No. 2, pp. 78-91.

192. Calculation based on the following data:

There were an estimated 211 cases of HIV reported in people under 14 reported in the US in 2005, the year of the fear study.

Centers for Disease Control and Prevention. (2007) “Cases of HIV infection and AIDS in the United States and Dependent Areas, 2005.” HIV/AIDS Surveillance Report. Vol. 17, Revised Edition. Centers for Disease Control and Prevention. Atlanta, GA.

An estimated 61,125,728 people in the US 14 or younger in 2008.

US Census Data. (2008) “General Demographic Characteristics: 2008 Population Estimates.” United States Census Bureau. Washington, DC. [Link](#)

193. These items did not make the top ten list for all ages. “Getting my girlfriend pregnant” did make the top ten list of fears among males (at #9), and if looking at females 15 to 18 only, “getting pregnant” was at #7.

Joy Burnham. (2005) “Fears of Children in the United States: An Examination of the American Fear Survey Schedule with 20 New Contemporary Fear items.” Measurement and Evaluation in Counseling and Development. Vol. 38, No. 2, pp. 78-91.

194. King Holmes, Ruth Levine, Marcia Weaver. (2004) “Effectiveness of Condoms in Preventing Sexually Transmitted Infections.” Bulletin of the World Health Organization. Vol. 84, No. 6, pp. 454-461.

Owen Devine, Sevgi Aral. (2004) “The Impact of Inaccurate Reporting of Condom Use and Imperfect Diagnosis of Sexually Transmitted Disease Infection in Studies of Condom Effectiveness: A Simulation-Based Assessment.” *Sexually Transmitted Diseases*. Vol. 31, No. 10, pp. 588-595.

S.C. Weller, K. Davis-Beaty. (2002) “Condom Effectiveness in Reducing Heterosexual HIV Transmission.” *Cochrane Database of Systematic Reviews*. No. 1.

An oft-cited piece of research supporting the claims of eliminating the risk is:

Isabelle De Vincenzi. (1994) “A Longitudinal Study of Human Immunodeficiency Virus Transmission by Heterosexual Partners.” *The New England Journal of Medicine*. Vol. 331, No. 6, pp. 341-346.

In this study, despite an estimated 15,000 acts of intercourse, HIV was not transmitted between any of 124 serodiscordant couples who used condoms consistently for vaginal and anal sex. Among 121 serodiscordant couples who used condoms inconsistently, 8 people infected their partners over the course of 20 months.

However, the participants in this study were all established couples, and the HIV-positive partners acquired the virus far enough in the past to know they were infected. As detailed in the final section of this book, the timing plays an important role in the spread of the disease, so these findings would not necessarily apply to casual sex partners.

195. Sagamore Institute. (2007) “Review of Comprehensive Sex Education Curricula.” *The Administration for Children and Families*. US Department of Health and Human Services. Washington, DC.
196. Markus Steiner. (1999) “Contraceptive Effectiveness: What Should the Counseling Message Be?” *Journal of the American Medical Association*. Vol. 282, No. 15, pp. 1405-1407.
197. Jacqueline Darroch, David Landry, Susheela Singh. (2000) “Changing Emphases in Sexuality Education in U.S. Public Secondary Schools, 1988-1999.” *Family Planning Perspectives*. Vol. 32, No. 6, pp. 204-212.
198. Bill Albert. (2010) “With One Voice 2010: America’s Adults and Teens Sound Off about Teen Pregnancy.” *The National Campaign to Prevent Teen and Unplanned Pregnancy*. Washington, DC.
199. Danice Eaton, Laura Kann, Steve Kinchen, Shari Shanklin, James Ross, Joseph Hawkins, William Harris, Richard Lowry, Tim McManus, David Chyen, Connie Lim, Lisa Whittle, Nancy Brener, Howell Wechsler. (2010) “Youth Risk Behavior Surveillance — United States, 2009.” *Morbidity and Mortality Weekly Report (MMWR)*. Vol. 59, No. SS-5, pp. 1-142. Centers for Disease Control and Prevention. Atlanta, GA.
200. Laetitia Lemoine. (2010) “Teen Sexual Behavior and Contraceptive Use: Data from the Youth Risk Behavior Survey, 2009.” *The National Campaign to Prevent Teen and Unplanned Pregnancy*. Washington, DC.

201. Willard Cates, Jr. (1996) "Contraception, Unintended Pregnancies, and Sexually Transmitted Diseases: Why Isn't a Simple Solution Possible?" *American Journal of Epidemiology*. Vol. 143, No. 4, pp. 311-318.
202. "Contraceptive," which is a device or drug intended to prevent impregnation, not "method of birth control," which would include abstinence.
203. Douglas Kirby. (2007) "Emerging Answers 2007: Research Findings on Programs to Reduce Teen Pregnancy and Sexually Transmitted Diseases." The National Campaign to Prevent Teen and Unplanned Pregnancy. Washington, DC.
204. This study was requested by Sen. Tom Coburn and Sen. Rick Santorum in 2005 and found that seven of eight programs reviewed had positive impacts. Sagamore Institute. (2007) "Review of Comprehensive Sex Education Curricula." The Administration for Children and Families, US Department of Health and Human Services. Washington, DC.
205. Centers for Disease Control and Prevention. (2008) "Summaries of Highlighted Research, 11 March 2008." Centers for Disease Control and Prevention. Atlanta, GA.
206. UNICEF. (2001). "A League Table of Teenage Births in Rich Nations." Innocenti Report Card. No. 3. UNICEF Innocenti Research Centre, Florence.
- The National Campaign to Prevent Teen and Unplanned Pregnancy. (2010) "Teen Birth Rates: How Does the United States Compare?" The National Campaign to Prevent Teen and Unplanned Pregnancy. Washington, DC.
- Source for United States:
- Joyce Martin, Brady Hamilton, Paul Sutton, Stephanie Ventura, T.J. Mathews, Michelle Osterman. (2010). "Births: Final Data for 2008." *National Vital Statistics Reports*. Vol. 59, No. 1, pp. 1-72. Centers for Disease Control. Atlanta, GA.
- For other countries:
- United Nations Statistical Division. (2011) "Demographic Yearbook 2008." United Nations. New York, NY.
- The US rate had been lowering for several years, but recently saw a reversal.
- Kathryn Kost, Stanley Henshaw, Liz Carlin. (2010). "U.S. Teenage Pregnancies, Births and Abortions: National and State Trends and Trends by Race and Ethnicity." Guttmacher Institute. Washington, DC.
207. With proper use, testing suggests latex condoms can provide a 97.4% success rate for blocking HIV and other small viruses.
- David Lytle, Licia Routson, Gerald Seaborn, Lurlene Dixon, Harry Bushar, Howard Cyr. (1997) "An In Vitro Evaluation of Condoms as Barriers to a Small Virus." *Sexually Transmitted Diseases*. Vol. 24, No. 3, pp. 161-164.
208. The higher failure rate is primarily due to inconsistent use, not failures of condoms themselves.

Markus Steiner, Willard Cates, Lee Warner. (1999) “The Real Problem with Male Condoms Is Nonuse.” *Sexually Transmitted Diseases*. Vol. 26, No. 8, pp. 459-462.

Markus Steiner. (1999) “Contraceptive Effectiveness: What Should the Counseling Message Be?” *Journal of the American Medical Association*. Vol. 282, No. 15, pp. 1405-1407.

209. Those who waited until age 17 or older to have sex reported more pleasure, and people who waited longer also felt less regret, guilt, and anxiety.

Susan Sprecher, Anita Barbee, Pepper Schwartz. (1995). “‘Was It Good for You Too?’ Gender Differences in First Sexual Intercourse Experiences.” *Journal of Sex Research*. Vol. 32, No. 1, pp. 3-15.

Daniel Wight, Alison Parkes, Vicki Strange, Elizabeth Allen, Chris Bonell, Marion Henderson. (2008) “The Quality of Young People’s Heterosexual Relationships: A Longitudinal Analysis of Characteristics Shaping Subjective Experience.” *Perspectives on Sexual and Reproductive Health*. Vol. 40, No. 4, pp. 226-237.

In another study, 70% of women who had sex before age 16 said they regretted it.

Nigel Dickson, Charlotte Paul, Peter Herbison, Phil Silva. (1997) “First Sexual Intercourse: Age, Coercion, and Later Regrets Reported by a Birth Cohort.” Vol. 316, No. 7124, pp. 29.

210. Susan Moore, Doreen Rosenthal. (1991) “Adolescent Invulnerability and Perceptions of AIDS Risk.” *Journal of Adolescent Research*. Vol. 6, No. 2, 164-180.
211. Arland Thornton, Linda Young-DeMarco. (2001). “Four Decades of Trends in Attitudes toward Family Issues in the United States: The 1960s through the 1990s.” *Journal of Marriage and the Family*. Vol. 63, No. 4, pp. 1009-1037.
212. When asked the following question: “Suppose a parent or other adult tells a teen the following: ‘I strongly encourage you not to have sex. However, if you do, you should use birth control or protection.’ Do you think this is a message that encourages teens to have sex?” almost 40% of adults said “yes,” but over 70% of teens said “no.”
- Bill Albert. (2010) “With One Voice 2010: America’s Adults and Teens Sound Off about Teen Pregnancy.” *The National Campaign to Prevent Teen and Unplanned Pregnancy*. Washington, DC.
213. Douglas Kirby. (2007) “Emerging Answers 2007: Research Findings on Programs to Reduce Teen Pregnancy and Sexually Transmitted Diseases.” *The National Campaign to Prevent Teen and Unplanned Pregnancy*. Washington, DC.

These findings have been reaffirmed with every major study of comprehensive sex education, even the ones most critical of it.

214. 53% of American high school juniors have had sex.

Danice Eaton, Laura Kann, Steve Kinchen, Shari Shanklin, James Ross, Joseph Hawkins, William Harris, Richard Lowry, Tim McManus, David Chyen, Connie Lim, Lisa Whittle, Nancy Brener, Howell Wechsler. (2010) “Youth Risk Behavior Surveillance — United States, 2009.” *Morbidity and Mortality Weekly Report (MMWR)*. Vol. 59, No. SS-5, pp. 1-142. Centers for Disease Control and Prevention. Atlanta, GA.

215. One recent study of note that supports abstinence-based education is:

John Jemmott III, Loretta Jemmott, Geoffrey Fong. (2010). “Efficacy of a Theory-Based Abstinence-Only Intervention over 24 Months.” *Archives of Pediatrics & Adolescent Medicine*. Vol. 164, No. 2, pp. 152-159.

It was the “first randomized controlled study to demonstrate that an abstinence-only intervention reduced the percentage of adolescents who reported any sexual intercourse for a long period.”

University of Pennsylvania. (2010) “Onset of Sexual Activity in Tweens Delayed by Theory-Based Abstinence-Only Program.” Press Release. Feb. 1, 2010. [Link](#)

Another study:

George Denny, Michael Young. (2006) “An Evaluation of an Abstinence-Only Sex Education Curriculum: An 18-Month Follow-Up.” *Journal of School Health*. Vol. 76, No. 8, pp. 414-422.

216. “Despite searching 30 databases, 16,765 abstracts, and unpublished literature ... No trial described procedures for randomly assigning participants or concealing the allocation sequence ... The majority of abstinence-only evaluations avoided [biological and behavioral] outcomes or failed to define them specifically ... Inappropriate analyses and selective reporting threaten the internal and external validity of trial results ... Without rigorous fidelity monitoring, few studies could reliably indicate whether interventions were actually delivered as planned.”

Kristen Underhill, Don Operario, Paul Montgomery. (2007) “Reporting Deficiencies in Trials of Abstinence-only Programmes for HIV Prevention.” *AIDS*. Vol. 21, No. 2, pp. 266-268.

217. Marion Howard, Judith Blamey McCabe. (1990) “Helping Teenagers Postpone Sexual Involvement.” *Family Planning Perspectives*. Vol. 22, No. 1, pp. 21-26.

218. Douglas Kirby, Meg Korpi, Richard Barth, Helen Cagampang. (1997) “The Impact of the Postponing Sexual Involvement Curriculum among Youths in California.” *Family Planning Perspectives*. Vol. 29, No. 3, pp. 100-108.

Christopher Trenholm, Barbara Devaney, Ken Fortson, Lisa Quay, Justin Wheeler, Melissa Clark. (2007) “Impacts of Four Title V, Section 510 Abstinence Education Programs.” *Mathematica Policy Research*. Princeton, NJ.

219. Especially the earliest programs.

Douglas Kirby. (1984) “Sexuality Education: An Evaluation of Programs and Their Effects.” Network Publications. Santa Cruz, CA.

220. There are literally hundreds of well-structured studies that come to nearly identical conclusions. One of the best overviews is:

Douglas Kirby. (2007) “Emerging Answers 2007: Research Findings on Programs to Reduce Teen Pregnancy and Sexually Transmitted Diseases.” The National Campaign to Prevent Teen and Unplanned Pregnancy. Washington, DC.

Following are findings from some other representative studies:

Comprehensive sex education led to less teen pregnancy, slightly less sex. Abstinence-only education had no significant effect on pregnancy and did not reduce the likelihood of sex.

Pamela Kohler, Lisa Manhart, William Lafferty. (2008) “Abstinence-Only and Comprehensive Sex Education and the Initiation of Sexual Activity and Teen Pregnancy.” *Journal of Adolescent Health*. Vol. 42, No. 4, pp. 344-351.

Abstinence-only education is ineffective. Declines in pregnancy rates are almost entirely attributable to increased contraceptive use, not abstinence education, since sexual activity barely changed, but contraceptive use rose greatly and pregnancy dropped greatly.

John Santelli, Laura Duberstein Lindberg, Lawrence Finer, Susheela Singh. (2007) “Explaining Recent Declines in Adolescent Pregnancy in the United States: The Contribution of Abstinence and Improved Contraceptive Use.” *American Journal of Public Health*. Vol. 97, No. 1, pp. 150-156.

“Although abstinence is a healthy behavioral option for teens, abstinence as a sole option for adolescents is scientifically and ethically problematic. A recent emphasis on abstinence-only programs and policies appears to be undermining more comprehensive sexuality education and other government-sponsored programs. We believe that abstinence-only education programs, as defined by federal funding requirements, are morally problematic, by withholding information and promoting questionable and inaccurate opinions. Abstinence-only programs threaten fundamental human rights to health, information, and life.”

John Santelli, Mary Ott, Maureen Lyon, Jennifer Rogers, Daniel Summers, Rebecca Schleifer. (2006) “Abstinence and Abstinence-Only Education: A Review of U.S. Policies and Programs.” *Journal of Adolescent Health*. Vol. 38, No. 1, pp. 72-81.

221. Kristen Underhill, Paul Montgomery, Don Operario. (2007) “Sexual Abstinence Only Programmes to Prevent HIV Infection in High Income Countries: Systematic Review.” *British Medical Journal*. Vol. 335, No. 7613, pp. 248-259.

222. “Several abstinence programs, including abstinence-until-marriage programs, have been rigorously evaluated in experimental studies with large

samples and found to have no overall impact on delay of initiation of sex, age of initiation of sex, return to abstinence, number of sexual partners, or use of condoms or other contraceptives ... A few other abstinence programs have been evaluated less rigorously, with smaller, quasi-experimental designs...In sum, no abstinence program has strong evidence of delaying sex, but one has modest evidence of doing so.”

Douglas Kirby. (2007) “Emerging Answers 2007: Research Findings on Programs to Reduce Teen Pregnancy and Sexually Transmitted Diseases.” The National Campaign to Prevent Teen and Unplanned Pregnancy. Washington, DC.

223. Most teens who had not had sex stated that their reason for not having sex yet was that doing so would be against their religion or morals. This was also the most popular answer in the previous study in 2002.
- Joyce Abma, Gladys Martinez, Casey Copen. (2010) “Teenagers in the United States: Sexual Activity, Contraceptive Use, and Childbearing, National Survey of Family Growth 2006-2008.” Vital and Health Statistics. Vol. 23, No. 30, pp. 1-47.
224. In essence, the Abstinence-Only message (delivered outside formal education programs) had already persuaded a large percentage of the population, giving it a very high baseline, making further incremental improvement difficult. On the other hand, the Safe Sex approach was encouraging behavior that would be very unlikely without education, giving it a low baseline, making incremental progress relatively easy to achieve.
225. American Medical Association. (2004) “Sexuality Education, Abstinence, and Distribution of Condoms in Schools.” Report No. H-170.968. American Medical Association, Chicago, IL.
226. John Anderson. (2005) “Resolution in Favor of Empirically Supported Sex Education and HIV Prevention Programs for Adolescents.” American Psychological Association. Motion passed at the Feb. 18-20, 2005 meeting of the APA Council of Representatives.
227. “Mainstream medical professional organizations, including the American College of Obstetricians and Gynecologists (ACOG), the Society for Adolescent Medicine (SAM), the American Academy of Pediatrics (AAP), the American Medical Association (AMA), and the American Public Health Association (APHA), oppose abstinence-only education and endorse comprehensive sexuality education that includes both abstinence and accurate information about contraception, human sexuality and STIs.”
- Mary Ott, John Santelli. (2007) “Abstinence and Abstinence-Only Education.” Current Opinion in Obstetrics and Gynecology. Vol. 19, No. 5, pp. 446-452.
228. Congress requested this study of Abstinence-Only programs under the Balanced Budget Act of 1997.

Christopher Trenholm, Barbara Devaney, Ken Fortson, Lisa Quay, Justin Wheeler, Melissa Clark. (2007) “Impacts of Four Title V, Section 510

Abstinence Education Programs: Final Report.” Mathematica Policy Research. Princeton, NJ.

229. Cynthia Dalliard. (2002) “Abstinence Promotion and Teen Family Planning: The Misguided Drive for Equal Funding.” Guttmacher Report on Public Policy. Vol. 5, pp. 1-3. Guttmacher Institute. Washington, DC.
230. The total number fluctuated over the years. As of Aug. 2008, 25 states had refused the funds.

Mailman School of Public Health. (2008) “Accuracy, Efficacy, and Ethics of Abstinence-Only Programs Questioned by Public Health Experts.” Sep. 19, 2008. Columbia University. New York, NY. [Link](#)

More details:

Marissa Raymond, Lylyana Bogdanovich, Dalia Brahmi, Laura Jane Cardinal, Gulielma Leonard Fager, LeighAnn Frattarelli, Gabrielle Hecker, Elizabeth Ann Jarpe, Adam Viera, Leslie Kantor, John Santelli. (2008) “State Refusal of Federal Funding for Abstinence-Only Programs.” Sexuality Research & Social Policy. Vol. 5, No. 3, pp. 44-55.

231. Ted Carter. (2004) “Evaluation Report for The Kansas Abstinence Education Program.” Kansas Department of Health. Topeka, KS.
232. Staff Reporter. (2005) “Texas Teens Increased Sex after Abstinence Program.” Reuters. Jan. 31, 2005.

Also discussed in:

W. Joseph Wyatt. (2005) “Texas Teens Increase Sex After Abstinence Program.” Behavior Analysis Digest. Vol. 17, No. 3, pp. 9-10. (Note: Not a peer-reviewed journal.)

233. U.S. Social Security Act, §510(b)(2) defined abstinence education as a program which:

“A. Has as its exclusive purpose teaching the social, psychological, and health gains to be realized by abstaining from sexual activity;  
 B. Teaches abstinence from sexual activity outside marriage as the expected standard for all school-age children;  
 C. Teaches that abstinence from sexual activity is the only certain way to avoid out-of-wedlock pregnancy, sexually transmitted diseases, and other associated health problems;  
 D. Teaches that a mutually faithful monogamous relationship in the context of marriage is the expected standard of sexual activity;  
 E. Teaches that sexual activity outside of the context of marriage is likely to have harmful psychological and physical effects;  
 F. Teaches that bearing children out of wedlock is likely to have harmful consequences for the child, the child’s parents, and society;  
 G. Teaches young people how to reject sexual advances and how alcohol and drug use increase vulnerability to sexual advances, and  
 H. Teaches the importance of attaining self-sufficiency before engaging in sexual activity.”



234. “C. Teaches that abstinence from sexual activity is the only certain way to avoid out-of-wedlock pregnancy, sexually transmitted diseases, and other associated health problems;”

U.S. Social Security Act, §510(b)(2)

235. “D. Teaches that a mutually faithful monogamous relationship in the context of marriage is the expected standard of sexual activity;”

U.S. Social Security Act, §510(b)(2)

Many Americans believe this, but most do not. While it is true that American society expects monogamy among married people, most individuals do not think sex among single adults is wrong.

88% of adults think cheating on a spouse is morally wrong (the highest of any activity on the poll), but only 35% think sex between unmarried adults is wrong – about the same as gambling or overeating.

Pew Research Center. (2006) “A Barometer of Modern Morals.” Pew Research Center. Washington, DC.

Also, most Americans 18-64 do not have negative views on living together before marriage. Most consider living in unmarried households to have either no effect or a positive effect on children. Most consider a couple who have lived together for five years to be just as committed in their relationship as a couple that has been married for the same time. About half think that living together before marriage makes couples less likely to get divorced; less than a third think it makes them more likely to divorce.

Lydia Saad. (2008) “By Age 24, Marriage Wins Out.” Gallup. Washington, DC. Aug. 8, 2008. [Link](#)

236. “E. Teaches that sexual activity outside of the context of marriage is likely to have harmful psychological and physical effects;”

U.S. Social Security Act, §510(b)(2)

Author’s Note: There is a huge difference between “is likely” and “increases the likelihood.” This could have been fixed simply by saying “more likely” instead of “likely,” as research supports that idea, but as it is worded, it is a throwback to the 1800s-era quackery mentioned at the beginning of the section.

To be even more accurate, “marriage” could have been changed to “a monogamous relationship,” as the impact of infidelity, regardless of marital status, has been widely documented.

237. Total federal funds allocated for abstinence-only education since 1996 exceeded \$1.5 billion in 2010.

Sexuality Information and Education Council of the United States. (2011) “Dedicated Federal Abstinence-Only-Until-Marriage Funding by Year. (1982–2010).” SEICUS. Washington, DC.

238. A Congressional report of federally funded abstinence-only curricula found that over 80 percent of curricula supported by the US Department of Health & Human Services contained major false, misleading, or distorted information about reproductive health. Specifically: False information about the effectiveness of contraceptives; false information about the risks of abortion; religious beliefs as scientific fact; stereotypes about boys and girls as scientific fact; and medical and scientific errors of fact.

Henry Waxman. (2004) "The Content of Federally Funded Abstinence-Only Education Programs." US House of Representatives Committee on Government Reform, Special Investigations Division. Washington, DC.

239. 78.4% of Americans identified as belonging to a Christian faith.

The Pew Forum on Religion & Public Life. (2008) "U.S. Religious Landscape Survey." Pew Research Center. Washington, DC.

240. Jacqueline Darroch, David Landry, Susheela Singh. (2000) "Changing Emphases in Sexuality Education In U.S. Public Secondary Schools, 1988-1999." *Family Planning Perspectives*. Vol. 32, No. 6, pp. 204-212.

241. Simon Forrest, Vicki Strange, Ann Oakley, The RIPPLE Study Team. (2004) "What Do Young People Want from Sex Education? The Results of a Needs Assessment from a Peer-Led Sex Education Programme." *Culture, Health and Sexuality*. Vol. 6, No. 4, pp. 337-354.

Lynda Measor, Coralie Tiffin, Katrina Miller. (2000) "Young People's Views on Sex Education: Education, Attitudes and Behaviour." RoutledgeFalmer. New York, NY.

242. Of note, this study found an abstinence-only program to have no effect on preventing virgins from having sex, or from convincing non-virgins to stop having sex, but curiously, those who were already having sex reported lower frequency and fewer partners after the program.

Elaine Borawski, Erika Trapl, Loren Lovegreen, Natalie Colabianchi, Tonya Block. (2005) "Effectiveness of Abstinence-Only Intervention in Middle School Teens." *American Journal of Health Behavior*. Vol. 29, No. 5, pp. 423-434.

243. Human Rights Watch. (2002) "Ignorance Only: HIV/AIDS, Human Rights, and Federally Funded Abstinence-Only Programs in the United States." Human Rights Watch. Vol. 14, No. 5, pp. 1-47. (Note: Not a peer-reviewed journal.)

244. For example, the "Be Proud! Be Responsible!" curriculum had quite a few explicit tips for enhancing sexual pleasure. These were presented in the context of encouraging condom use, but many parents would find their nature inappropriate for their children.

Sagamore Institute. (2007) "Review of Comprehensive Sex Education Curricula." The Administration for Children and Families. US Department of Health and Human Services. Washington, DC.

245. Jeremiah Films. (1991) "No Second Chance." VHS Cassette. Jeremiah Films. Jacksonville, FL.  
Some of the content is discussed in:  
Susan Rose. (2005) "Going Too Far? Sex, Sin and Social Policy." *Social Forces*. Vol. 84, No. 2, pp. 1207-1232.
246. Peter Bearman, Hannah Brückner. (2001) "Promising the Future: Virginity Pledges and First Intercourse." *American Journal of Sociology*. Vol. 106, No. 4, pp. 859-911.  
This does not suggest causality, i.e., it is not as if making a pledge caused people to not use condoms. Both being more likely to pledge and being less likely to use contraceptives are both associated with fundamentalist Christian values.
247. Jennifer Manlove, Suzanne Ryan, Kerry Franzetta. (2003) "Patterns of Contraceptive Use within Teenagers' First Sexual Relationships." *Perspectives on Sexual and Reproductive Health*. Vol. 35, No. 6, pp. 246-255.
248. Celia Lescano, Christopher Houck, Larry Brown, Glenn Doherty, Ralph DiClemente, M. Isabel Fernandez, David Pugatch, William Schlenger, Barbara Silver. (2009) "Correlates of Heterosexual Anal Intercourse among At-Risk Adolescents and Young Adults." *American Journal of Public Health*. Vol. 99, No. 6, pp. 1131-1136.
249. Jamie Mullaney. (2006). "Everyone Is NOT Doing It: Abstinence and Personal Identity." University of Chicago Press. Chicago, IL.
250. Angela Lipsitz, Paul Bishop, Christine Robinson. (2003) "Virginity Pledges: Who Takes Them and How Well Do They Work?" Findings presented at the 15th Annual Convention of the American Psychological Society in Atlanta, GA. May 31, 2003.
251. Female pledgers reported six times as much oral sex, males reported four times as much anal sex. All had the same rate of STDs as non-pledgers, but were less likely to get tested or use condoms.  
Hannah Brückner, Peter Bearman. (2005) "After the Promise: The STD Consequences of Adolescent Virginity Pledges." *Journal of Adolescent Health*. Vol. 36, No. 4, pp. 271-278.
252. "Anal sex was much more common among adolescents who had initiated vaginal sex (21%) compared to virgins (1%)."  
Laura Lindberg, Rachel Jones, John Santelli. (2008) "Non-Coital Sexual Activities Among Adolescents." *Journal of Adolescent Health*. Vol. 42, No. 2, Supplement 1, pp. 44-45.  
This is similar to earlier findings, suggesting no rise.  
Mark Schuster, Robert Bell, David Kanouse. (1996) "The Sexual Practices of Adolescent Virgins: Genital Sexual Activities of High School Students Who Have Never Had Vaginal Intercourse." *American Journal of Public Health*. Vol. 86, No. 11, pp. 1570-1576.

253. Melina Bersamin, Samantha Walker, Elizabeth Waiters, Deborah Fisher, Joel Grube. (2005) “Promising to Wait: Virginity Pledges and Adolescent Sexual Behavior.” *Journal of Adolescent Health*. Vol. 36, No. 5, pp. 428-443.
254. Janet Elise Rosenbaum. (2009) “Patient Teenagers? A Comparison of the Sexual Behavior of Virginity Pledgers and Matched Nonpledgers” *Pediatrics*. Vol. 123, No. 1, pp. e110-e120.

255. This study found comprehensive sex education to significantly reduce pregnancy and slightly reduce sex. Abstinence-only education had no effect on either. This report was noted since neither approach reduced STDs, and the rates of pregnancy, although lowered, remained high.

Pamela Kohler, Lisa Manhart, William Lafferty. (2008) “Abstinence-Only and Comprehensive Sex Education and the Initiation of Sexual Activity and Teen Pregnancy.” *Journal of Adolescent Health*. Vol. 42, No. 4, pp. 344-351.

256. “...better that ten guilty persons escape than that one innocent suffer.”

William Blackstone. (1773) “Commentaries on the Laws of England.” Fifth Edition. Clarendon Press, Oxford.

257. In this passage, the Lord says he would spare the entire city of Sodom if he found ten righteous people there.

King James Bible. (1980) Cambridge University Press. Cambridge, England. Genesis 18:20-33.

258. 93% of adults and 87% of teens said it was very or somewhat important that teens be given a strong message that they should not have sex until they are at least out of high school.

Bill Albert. (2010) “With One Voice 2010: America’s Adults and Teens Sound Off about Teen Pregnancy.” The National Campaign to Prevent Teen and Unplanned Pregnancy. Washington, DC.

259. Laura Stepp. (2007) “Study Casts Doubt on Abstinence-Only Programs.” *The Washington Post*. Apr. 14, 2007. [Link](#)

260. John Jemmott III, Loretta Jemmott, Geoffrey Fong. (2010). “Efficacy of a Theory-Based Abstinence-Only Intervention over 24 Months.” *Archives of Pediatrics & Adolescent Medicine*. Vol. 164, No. 2, pp. 152-159.

It was the “first randomized controlled study to demonstrate that an abstinence-only intervention reduced the percentage of adolescents who reported any sexual intercourse for a long period.”

University of Pennsylvania. (2010) “Onset of Sexual Activity in Tweens Delayed by Theory-Based Abstinence-Only Program.” Press Release. Feb. 1, 2010. [Link](#)

“The findings are the first clear evidence that an abstinence program could work.”

Rob Stein. (2010) “Abstinence-Only Programs Might Work, Study Says.” *The Washington Post*. Feb. 2, 2010. [Link](#)

261. Rob Stein. (2010) “Abstinence-Only Programs Might Work, Study Says.” The Washington Post. Feb. 2, 2010. [Link](#)
262. Rob Stein. (2010) “Abstinence-Only Programs Might Work, Study Says.” The Washington Post. Feb. 2, 2010. [Link](#)
- Three years earlier, Sarah Brown had said of the Mathematica report to Congress:
- “There’s not a lot of good news here for people who pin their hopes on abstinence-only education...This is the first study with a solid, experimental design, the first with adequate numbers and long-term follow-up, the first to measure behavior and not just intent. On every measure, the effectiveness of the programs was flat.”
- Laura Stepp. (2007) “Study Casts Doubt on Abstinence-Only Programs.” The Washington Post. Apr. 14, 2007. [Link](#)
263. Mara Gay. (2010) “Study: Teaching Abstinence Works Better Than Sex Ed.” AOL News. Feb. 2, 2010. [Link](#)
264. Tamar Lewin. (2010) “Quick Response to Study of Abstinence Education.” The New York Times. Feb. 2, 2010. [Link](#)
265. John Jemmott III, Loretta Jemmott, Geoffrey Fong. (2010). “Efficacy of a Theory-Based Abstinence-Only Intervention over 24 Months.” Archives of Pediatrics & Adolescent Medicine. Vol. 164, No. 2, pp. 152-159.
266. Rob Stein. (2010) “Abstinence-Only Programs Might Work, Study Says.” The Washington Post. Feb. 2, 2010. [Link](#)
267. Rob Stein. (2010) “Abstinence-Only Programs Might Work, Study Says.” The Washington Post. Feb. 2, 2010. [Link](#)
268. Mara Gay. (2010) “Study: Teaching Abstinence Works Better Than Sex Ed.” AOL News. Feb 2, 2010. [Link](#)
269. Jeffrey Weiss. (2010) “Abstinence-Only Sex Education Works, Study Finds, but Lessons Murky.” Dallas Morning News. Feb. 8, 2010. [Link](#)
270. David Muir, Hanna Siegel. (2010) “‘Abstinence-Only’ Education Gets a Boost.” ABC News. Feb. 2, 2010. [Link](#)
271. Jeffrey Weiss. (2010) “Abstinence-Only Sex Education Works, Study Finds, but Lessons Murky.” Dallas Morning News. Feb. 8, 2010. [Link](#)
272. “Historically in the United States as well as in many other cultures, young women have sought to maintain virginity until marriage, seeing it as precious, whereas young men have been encouraged to lose their virginity, often seeing it as a stigma.”
- Laura Carpenter. (2002). “Gender and the Meaning and Experience of Virginity Loss in Contemporary United States.” Gender and Society. Vol. 16, No. 3, pp. 345-365.
273. 61% of teens agreed that teen boys often receive the message that they are supposed to have sex. 59% agreed that teen girls often receive the message

that attracting boys and looking sexy is one of the most important things they can do.

Bill Albert. (2007) “With One Voice 2007: America’s Adults and Teens Sound Off about Teen Pregnancy.” The National Campaign to Prevent Teen and Unplanned Pregnancy. Washington, DC.

274. 73% of teen boys and 78% of teen girls said they did not believe it is embarrassing for teens to admit they are virgins. 75% overall, up from 73% from 2003. 22% of teens, 42% of adults said they believed it is embarrassing for teens to admit they are virgins.

Bill Albert. (2007) “With One Voice 2007: America’s Adults and Teens Sound Off about Teen Pregnancy.” The National Campaign to Prevent Teen and Unplanned Pregnancy. Washington, DC.

275. Teens overwhelmingly say their parents influence their decisions about sex, more than all other external sources combined, including friends, teachers, sex educators, religious leaders, and the media.

Bill Albert. (2010) “With One Voice 2010: America’s Adults and Teens Sound Off about Teen Pregnancy.” The National Campaign to Prevent Teen and Unplanned Pregnancy. Washington, DC.

The impact is also supported by research. This study, for example, finds the impact of parents to be dramatically higher than a formal sex education program, even when delivering the same message.

Richard Crosby, Amy Hanson, Kristin Rager. (2009) “The Protective Value of Parental Sex Education: A Clinic-Based Exploratory Study of Adolescent Females.” *Journal of Pediatric and Adolescent Gynecology*. Vol. 22, No. 3, pp. 189-192.

276. Most virgin teens said their reason for not having sex yet was that doing so would be against their religion or morals. This was also the most popular answer in the previous study in 2002.

Joyce Abma, Gladys Martinez, Casey Copen. (2010) “Teenagers in the United States: Sexual Activity, Contraceptive Use, and Childbearing, National Survey of Family Growth 2006-2008.” *Vital and Health Statistics*. Vol. 23, No. 30, pp. 1-47.

277. Douglas Kirby. (2007) “Emerging Answers 2007: Research Findings on Programs to Reduce Teen Pregnancy and Sexually Transmitted Diseases.” The National Campaign to Prevent Teen and Unplanned Pregnancy. Washington, DC.

Sue Alford. (2008) “Science and Success, Second Edition: Sex Education and Other Programs that Work to Prevent Teen Pregnancy, HIV & Sexually Transmitted Infections.” *Advocates for Youth*. Washington, DC.

278. In 1999, sex education typically began in the fifth grade.

David Landry, Susheela Singh, Jacqueline Darroch. (2000) “Sexuality Education in Fifth and Sixth Grades in U.S. Public Schools, 1999.” *Family Planning Perspectives*. Vol. 32, No. 5, pp. 212-219.

279. The program in the University of Pennsylvania study discussed earlier taught students in the sixth and seventh grade. Although this program has not been tested with older students yet, logic would suggest that it would become less effective as students became older and more began having sex.

John Jemmott III, Loretta Jemmott, Geoffrey Fong. (2010). “Efficacy of a Theory-Based Abstinence-Only Intervention over 24 Months.” *Archives of Pediatrics & Adolescent Medicine*. Vol. 164, No. 2, pp. 152-159.

280. Largely anecdotal evidence, but widely reported in the media.

Lisa Remez. (2000) “Oral Sex among Adolescents: Is It Sex or Is It Abstinence?” *Family Planning Perspectives*. Vol. 32, No. 6, pp. 298-304.

John Stossel. (2006) “Sex in Middle School? ‘Just Say No’ Doesn’t Cut It in Keeping Kids from Sex.” *ABC News*. Dec. 6, 2006. [Link](#)

Laura Sessions Stepp. (1999) “Unsettling New Fad Alarms Parents: Middle School Oral Sex.” *The Washington Post*. Jul. 8, 1999. p. A1. [Link](#)

281. Patricia Hersch. (1999) “A Tribe Apart: A Journey into the Heart of American Adolescence.” Ballantine Books. New York, NY.
282. Bonnie Halpern-Felsher, Jodi Cornell, Rhonda Kropp, Jeanne Tschann. (2005) “Oral Versus Vaginal Sex among Adolescents: Perceptions, Attitudes, and Behavior.” *Pediatrics*. Vol. 115, No. 4, pp. 845-851.
283. About 32% of high school freshmen have had sex, and that figure increases by roughly 10% each year.

9th grade: 31.6%; 10th grade: 40.9%; 11th grade: 53.0%; 12th grade: 62.3%.

Danice Eaton, Laura Kann, Steve Kinchen, Shari Shanklin, James Ross, Joseph Hawkins, William Harris, Richard Lowry, Tim McManus, David Chyen, Connie Lim, Lisa Whittle, Nancy Brener, Howell Wechsler. (2010) “Youth Risk Behavior Surveillance — United States, 2009.” *Morbidity and Mortality Weekly Report (MMWR)*. Vol. 59, No. SS-5, pp. 1-142. Centers for Disease Control and Prevention. Atlanta, GA.

284. 41% of parents thought MTV’s “16 and Pregnant” glamorizes teen pregnancy, while 82% of teens thought it “helps teens better understand the challenges of pregnancy and parenthood.”

Bill Albert. (2010) “With One Voice 2010: America’s Adults and Teens Sound Off about Teen Pregnancy.” *The National Campaign to Prevent Teen and Unplanned Pregnancy*. Washington, DC.

285. Eight in 10 teens said they knew everything they needed to avoid an unplanned pregnancy, yet half said they knew nothing or little about how to use condoms.

Bill Albert. (2010) “With One Voice 2010: America’s Adults and Teens Sound Off about Teen Pregnancy.” The National Campaign to Prevent Teen and Unplanned Pregnancy. Washington, DC.

286. Susan Cohen. (2004) “Beyond Slogans: Lessons from Uganda’s Experience with ABC and HIV/AIDS.” *Reproductive Health Matters*. Vol. 12, No. 23, pp. 132-135.

287. The AWAKE method is fictional and is not intended to represent any known method. Some notes:

The phrase “before graduating” is used instead of “in high school” or “as a teenager” both to encourage graduation as well as to place focus on the personal advantages of delaying sex and its connection to academic performance, rather than tying it to an age or stage of life that young people yearn to grow beyond. This phrase would also allow parents and educators to demonstrate the benefits of delaying sex throughout college for those who go, although it would not be the focus in high school due to the time horizon of students being too far in the future to be persuasive.

“Keep your promise” presumptively assumes monogamy, and uses more personal and emotionally persuasive language than discussing monogamy directly.

The emphasis on condoms was changed to “every time” because adolescents already report fairly high rates of using condoms; however, just like every other group, they do not use them consistently.

Debby Herbenick, Michael Reece, Vanessa Schick, Stephanie A. Sanders, Brian Dodge, J. Dennis Fortenberry. (2010) “Condom Use Rates in a National Probability Sample of Males and Females Ages 14 to 94 in the United States.” *The Journal of Sexual Medicine*. Vol. 7, Suppl. 5, pp. 266-276.

288. Mark Murave, Roy Baumeister, Dianne Tice. (1999) “Longitudinal Improvement of Self-Regulation through Practice: Building Self-Control Strength through Repeated Exercise.” *The Journal of Social Psychology*. Vol. 139, No. 4, pp. 446-457.

289. The impact of self-efficacy on health and decision-making is widely documented. A good place to start:

Ann O’Leary. (1985) “Self-Efficacy and Health.” *Behaviour Research and Therapy*. Vol. 23, No. 4, pp. 437-451.

290. Karen Hacker, Yared Amare, Nancy Strunk, Leslie Horst. (2000) “Listening to Youth: Teen Perspectives on Pregnancy Prevention.” *Journal of Adolescent Health*. Vol. 26, No. 4, pp. 279-288.

Denise Hallfors, Martha Waller, Daniel Bauer, Carol Ford, Carolyn Halpern. (2005) “Which Comes First in Adolescence—Sex and Drugs or Depression?” *American Journal of Preventive Medicine*. Vol. 29, No. 3, pp. 163-170.



291. Theoretical future research. However, this work suggests that adhering to abstinence would be associated with a wide variety of other positive behaviors. Of note:

“Perceived academic and self-regulatory efficacy concurrently and longitudinally deterred transgressiveness both directly and by fostering prosocialness and adherence to moral self-sanctions for harmful conduct...Moral disengagement and prosocialness affected transgressiveness through the mediating influence of irascible affectivity and hostile rumination. Ruminative affectivity, in turn, both concurrently and longitudinally affected transgressiveness. Moral disengagement also contributed independently to variance in transgressiveness over time.”

Albert Bandura, Gian Vittorio Caprara, Claudio Barbaranelli, Concetta Pastorelli, Camillo Regalia. (2001) “Sociocognitive Self-Regulatory Mechanisms Governing Transgressive Behavior.” *Journal of Personality and Social Psychology*. Vol. 80, No. 1, pp. 125-135.

292. Theoretical future research. Based on the fact that the abstinence-only program in the University of Pennsylvania study included eight hours of instruction, plus follow-up sessions, whereas students normally only received an hour for a comparable lesson.

Jeffrey Weiss. (2010) “Abstinence-Only Sex Education Works, Study Finds, but Lessons Murky.” *Dallas Morning News*. Feb. 8, 2010. [Link](#)

293. The youngest students are often taught lessons like this today, but this new approach would make several changes. First, it would provide a rich source of research-based lessons rather than the widely inconsistent and burdensome approach currently used. Second, it would get students used to the subject early, accepting it just like any other subject, which becomes more important at later ages. Most important, it continues non-academic lessons past the point at which students transition from having one teacher to having separate teachers for each subject (which normally happens in middle school), since after this point non-academic lessons all but stop (in public schools).

294. This was already a feature in many sex education programs due to intoxication being a primary risk factor, as well as other independent interventions. The previously stated benefits would again apply.

David Landry, Jacqueline Darroch, Susheela Singh, Jenny Higgins. (2003) “Factors Associated with the Content of Sex Education in U.S. Public Secondary Schools.” *Perspectives on Sexual and Reproductive Health*. Vol. 35, No. 6, pp. 261-269.

295. 9% of public school principals listed teaching moral values among the top three goals of their school.

Kerry Gruber, Susan Wiley, Stephen Broughman, Gregory Strizek, Marisa Burian-Fitzgerald. (2002) “Schools and Staffing Survey, 1999-2000: Overview of the Data for Public, Private, Public Charter, and Bureau of

Indian Affairs Elementary and Secondary Schools.” US Department of Education, National Center for Education Statistics. Washington, DC.

296. 66% of private school principals listed academic excellence among the top three goals of their school; 64% listed religious development.

Kerry Gruber, Susan Wiley, Stephen Broughman, Gregory Strizek, Marisa Burian-Fitzgerald. (2002) “Schools and Staffing Survey, 1999-2000: Overview of the Data for Public, Private, Public Charter, and Bureau of Indian Affairs Elementary and Secondary Schools.” US Department of Education, National Center for Education Statistics. Washington, DC.

297. Caveat: Although private schools do have better overall test scores in math and reading, statistical analysis shows this to be more closely related to race and income than to type of school.

Martha Naomi Alt, Katharin Peter. (2002) “Findings from the Condition of Education 2002: Private Schools - A Brief Portrait.” US Department of Education, National Center for Education Statistics. Washington, DC.

298. The impact of teen pregnancy alone, on both students with children and their classmates, would have a substantial effect. Teen pregnancy has a two-way relationship with academic performance. Most teen mothers never graduate from high school.

Kate Perper, Kristen Peterson, Jennifer Manlove. (2010) “Diploma Attainment among Teen Mothers.” Fact Sheet. Publication #2010-01. Child Trends. Washington, DC.

Also, high grades and planning to attend college are associated with lower rates of teen pregnancy.

Douglas Kirby. (2002) “The Impact of Schools and School Programs upon Adolescent Sexual Behavior.” *The Journal of Sex Research*. Vol. 39, No. 11, pp. 27-33.

299. Sarah Kliff. (2009) “The Future of Abstinence.” *Newsweek/The Daily Beast*. Oct. 26, 2009. [Link](#)
300. Although they were already widely used in the 1960s, birth control pills were not guaranteed to be legally available to unmarried women in all states until 1972.

US Supreme Court. (1972) *Eisenstadt v. Baird*, 405 U.S. 438.

301. Divorce rates doubled in the US between the mid-1960s and mid-1970s. Also, divorce rates were abnormally high in the 1970s, abnormally low in the 1950s, and have since leveled out to expected levels.

Betsey Stevenson, Justin Wolfers. (2007) “Marriage and Divorce: Changes and Their Driving Forces.” *Journal of Economic Perspectives*. Vol. 21, No. 2, pp. 27-52.

See also:

Susan Carter, Scott Sigmund Gartner, Michael Haines, Alan Olmstead, Richard Sutch, Gavin Wright. (2006) "Historical Statistics of the United States: Millennial Edition." Cambridge University Press. New York, NY.

302. The first no-fault divorces in the US were signed into law by then-Governor Ronald Reagan in 1969. The law did not take effect until the beginning of the following year.

Aidan Gough. (1970) "Community Property and Family Law: The Family Law Act of 1969." Vol. 1970, No. 1, pp. 272-305.

303. Marriage rates peaked in 1970 and declined steadily through 2009.

W. Bradford Wilcox, Elizabeth Marquardt, David Popenoe, Barbara Dafoe Whitehead. (2010) "The State of Our Unions 2010 – When Marriage Disappears: The New Middle America." National Marriage Project, University of Virginia. Charlottesville, VA.

304. Gregory Herek, Eric Glunt. (1988) "An Epidemic of Stigma: Public Reactions to AIDS." *American Psychologist*. Vol. 43, No. 11, pp. 886-891.

305. There has been almost no change in the annual number of new HIV cases since 1991. Note: Since the total number of people living with the disease has grown, the ratio of those with the disease infecting new people each year has declined, but the total number of new cases is a more commonly used benchmark.

H. Irene Hall, Ruiguang Song, Philip Rhodes, Joseph Prejean, Qian An, Lisa Lee, John Karon, Ron Brookmeyer, Edward Kaplan, Matthew McKenna, Robert Janssen. (2008) "Estimation of HIV Incidence in the United States." *Journal of the American Medical Association*. Vol. 300, No. 5, pp. 520-529.

306. The vast majority of people living with AIDS in the United States today contracted the disease through male-to-male sexual contact.

Centers for Disease Control and Prevention. (2011) "AIDS Surveillance - Trends (1985-2009)." Centers for Disease Control and Prevention. Atlanta, GA.

"In 2007, MSM were 44 to 86 times as likely to be diagnosed with HIV compared with other men, and 40 to 77 times as likely as women...A recent CDC study found that in 2008 one in five (19%) MSM in 21 major US cities were infected with HIV, and nearly half (44%) were unaware of their infection."

Centers for Disease Control and Prevention. (2010) "HIV among Gay, Bisexual and Other Men Who Have Sex with Men (MSM)." Centers for Disease Control and Prevention. Atlanta, GA.

"In 2009, MSM accounted for 57% of all persons and 75% of men with a diagnosis of HIV infection in the 40 states with longstanding, confidential, name-based HIV infection reporting."

Lucia Torian, Mi Chen, Philip Rhodes, H. Irene Hall. (2011) "HIV Surveillance --- United States, 1981-2008." *Morbidity and Mortality Weekly*

Report (MMWR). Vol. 60, No. 21, pp. 689-693. Centers for Disease Control and Prevention. Atlanta, GA.

“MSM are the only risk group in the U.S. in which new HIV infections are increasing. While new infections have declined among both heterosexuals and injection drug users, the annual number of new HIV infections among MSM has been steadily increasing since the early 1990s.”

Centers for Disease Control and Prevention. (2010) “HIV and AIDS among Gay and Bisexual Men.” Centers for Disease Control and Prevention. Atlanta, GA.

307. About 70% of gay men identify as Christians. Only 2.3% identify as any other religion. The rest are agnostic, atheistic, or have no stated religion.

Gregory Herek, Aaron Norton, Thomas Allen, Charles Sims. (2010) “Demographic, Psychological, and Social Characteristics of Self-Identified Lesbian, Gay, and Bisexual Adults in a US Probability Sample.” *Sexuality Research and Social Policy*. Vol. 7, No. 3, pp. 176-200.

308. 78.4% of Americans identified as belonging to a Christian faith.

The Pew Forum on Religion & Public Life. (2008) “U.S. Religious Landscape Survey.” Pew Research Center. Washington, DC.

309. 39% of Americans on average attend church weekly; only 7% of gay men do the same. 80% of gay men attend only a few times a year or never at all.

The Pew Forum on Religion & Public Life. (2003) “Religious Beliefs Underpin Opposition to Homosexuality.” Pew Research Center. Washington, DC.

310. The clearest examples are Leviticus 18:22 and 20:13. Other commonly cited passages are Romans 1:26-27, I Timothy 1:9-10, and I Corinthians 6:9.

Note: Like every passage in the Bible, many debate the translation, interpretation, and social context of these passages.

311. This is also a point of heated debate. For example, a common counterargument to the fact that Jesus never condemned homosexuality is to say that Jesus did not actually say much at all in the Bible, and that there are other activities that Jesus never talked about specifically, such as torture or child molestation, that are also considered wrong.

There are references in the New Testament that condemn homosexual acts, such as Romans 1:26-27, but detractors argue that the writer (Paul) also held other views (such as supporting slavery) that are seen as wrong today.

Like most debates over the Bible, it is unlikely that this will ever be resolved, as virtually every argument on either side contends that some verses are applicable while others are not.

312. Jesus reduces the 613 commandments of Jewish law to two:

“Jesus said unto him, Thou shalt love the Lord thy God with all thy heart, and with all thy soul, and with all thy mind. This is the first and great

commandment. And the second is like unto it, Thou shalt love thy neighbour as thyself. On these two commandments hang all the law and the prophets.”

Matthew 22:37-40.

Jesus refutes another common rabbinic teaching:

“Ye have heard that it hath been said, Thou shalt love thy neighbour, and hate thine enemy. But I say unto you, Love your enemies, bless them that curse you, do good to them that hate you, and pray for them which despitefully use you, and persecute you”

Matthew 5:43-44.

Paul says that Jesus’ sacrifice frees his followers from having to follow the mitzvot:

“Blotting out the handwriting of ordinances that was against us, which was contrary to us, and took it out of the way, nailing it to his cross; And having spoiled principalities and powers, he made a shew of them openly, triumphing over them in it.

...

Wherefore if ye be dead with Christ from the rudiments of the world, why, as though living in the world, are ye subject to ordinances, (Touch not; taste not; handle not; Which all are to perish with the using;) after the commandments and doctrines of men? Which things have indeed a shew of wisdom in will worship, and humility, and neglecting of the body: not in any honour to the satisfying of the flesh.”

Paul 2:14-15,20-23.

King James Bible. (1980) Cambridge University Press. Cambridge, England.

313. Jesus is condemned to death for claiming to be the son of God. The details vary, but the events are similar in other books.

“But he held his peace, and answered nothing. Again the high priest asked him, and said unto him, Art thou the Christ, the Son of the Blessed? And Jesus said, I am: and ye shall see the Son of man sitting on the right hand of power, and coming in the clouds of heaven. Then the high priest rent his clothes, and saith, What need we any further witnesses? Ye have heard the blasphemy: what think ye? And they all condemned him to be guilty of death.”

King James Bible. (1980) Cambridge University Press. Cambridge, England. Matthew 5:43-44. Mark 14:61.

314. “Thou shalt not lie with mankind, as with womankind: it is abomination.”

King James Bible. (1980) Cambridge University Press. Cambridge, England. Leviticus 18:22.

315. “And all that have not fins and scales in the seas, and in the rivers, of all that move in the waters, and of any living thing which is in the waters, they shall be an abomination unto you.”

Leviticus 11:10.

Other commonly cited examples of laws that are no longer followed today by Christians include forbidding wearing mixed fiber clothing, trimming a beard, or getting a tattoo.

Leviticus 19:19,27-28.

King James Bible. (1980) Cambridge University Press. Cambridge, England.

316. Most Americans say they receive “quite a bit” or “a great deal” of guidance from religion in their daily lives. By comparison, only one in five gay men say the same. The rest of the LGBT community reported higher numbers, but still significantly lower than the national average. (To be precise, the survey included gay men, lesbians, and bisexuals of both sexes, but no transgender people. However, this relatively small segment of an already small group would not significantly change aggregate results.)

Gregory Herek, Aaron Norton, Thomas Allen, Charles Sims. (2010) “Demographic, Psychological, and Social Characteristics of Self-Identified Lesbian, Gay, and Bisexual Adults in a US Probability Sample.” *Sexuality Research and Social Policy*. Vol. 7, No. 3, pp. 176-200.

Gay men are 66% more likely to be atheists, agnostics, or have no religion than Americans on average. Comparative data source:

The Pew Forum on Religion & Public Life. (2008) “U.S. Religious Landscape Survey.” Feb. 2008. Pew Research Center. Washington, DC.

317. 39% of Americans on average attend church weekly; only 7% of gay men do the same. 80% of gay men attend only a few times a year or never at all.

The Pew Forum on Religion & Public Life. (2003) “Religious Beliefs Underpin Opposition to Homosexuality.” Pew Research Center. Washington, DC.

318. Most people said that their church speaks out on homosexuality, and only 4% said that the church said it should be accepted.

The Pew Forum on Religion & Public Life. (2003) “Religious Beliefs Underpin Opposition to Homosexuality.” Pew Research Center, Washington, DC.

319. Louis Theroux (Writer), Geoffrey O’Connor (Director). (2007) “The Most Hated Family in America.” BBC. Broadcast Apr. 1, 2007.

According to the home page of the Westboro Baptist Church website:

“GOD HATES FAGS’ -- though elliptical -- is a profound theological statement, which the world needs to hear more than it needs oxygen, water and bread.”

Westboro Baptist Church. (2011) GodHatesFags.com. Sep. 2, 2011. [Link](#)

Of note: Some have responded to the Westboro Baptist Church’s aforementioned infamous “GOD HATES FAGS” signs with their own

parodical “GOD HATES FIGS” signs, an idea which refers to scripture, albeit obliquely:

Jesus curses a fig tree:

Matthew 21:19

Jesus forbids his disciples to eat figs:

Mark 11:13-14.

King James Bible. (1980) Cambridge University Press. Cambridge, England.

See also:

Dan Savage. (2009) “God Hates Figs.” *The Stranger*. Mar. 12, 2009. [Link](#)

320. As of August 2011, same-sex marriage was allowed by six state governments (Connecticut, Iowa, Massachusetts, New Hampshire, New York, and Vermont) as well as in Washington, DC and by various Native American governments. Other states offered legal unions for same-sex couples, but they were not called marriages.
321. While most views on homosexuality in general are roughly evenly split, negative views, such as believing it to be a sin to engage in homosexual behavior, are much more prevalent among those with a high level of religious commitment.
- The Pew Forum on Religion & Public Life. (2003) “Religious Beliefs Underpin Opposition to Homosexuality.” Pew Research Center. Washington, DC.
322. Of those who attend religious services weekly, only 22% believe that homosexuality is something people are born with and most believe it is something that can be changed.
- The Pew Forum on Religion & Public Life. (2003) “Religious Beliefs Underpin Opposition to Homosexuality.” Pew Research Center. Washington, DC.
323. Nine out of 10 gay men say they have no choice at all regarding their sexual orientation.
- Gregory Herek, Aaron Norton, Thomas Allen, Charles Sims. (2010) “Demographic, Psychological, and Social Characteristics of Self-Identified Lesbian, Gay, and Bisexual Adults in a US Probability Sample.” *Sexuality Research and Social Policy*. Vol. 7, No. 3, pp. 176-200.
324. About “Born This Way,” Elton John said: “This is the new ‘I Will Survive.’ That was the gay anthem. This is the new gay anthem. Actually, it’s not a gay anthem — it can apply to anybody.”
- Tanner Stransky. (2010) “Elton John: Q&A.” *Entertainment Weekly*. No. 1124. Oct. 15, 2010. [Link](#)
325. Suzi Parker. (2010) “Lady Gaga’s ‘Don’t Ask, Don’t Tell’ Activism Is Getting Results.” *AOL News*. Sep. 16, 2010. [Link](#)

326. Ann Powers. (2011) “First Take: Lady Gaga’s ‘Born This Way.’” National Public Radio. May 18, 2011. [Link](#)
- Dan Zak. (2009) “Lady Gaga, Already a Gay Icon, Shows She’s an Activist Too.” The Washington Post. Oct. 12, 2009. [Link](#)
327. “In 2007, MSM were 44 to 86 times as likely to be diagnosed with HIV compared with other men, and 40 to 77 times as likely as women...A recent CDC study found that in 2008 one in five (19%) MSM in 21 major US cities were infected with HIV, and nearly half (44%) were unaware of their infection.”
- Centers for Disease Control and Prevention. (2010) “HIV among Gay, Bisexual and Other Men Who Have Sex with Men (MSM).” Centers for Disease Control and Prevention. Atlanta, GA.
328. “Relatively” means “relative to straight men.” Note: This compares men who are openly non-monogamous. (How many people are secretly non-monogamous, regardless of gender or sexual orientation, is very hard to quantify.)
- In this study, over half of gay male couples were either in open relationships (47%) or in relationships in which one partner thought it was monogamous and the other did not (8%). This amount dwarfs even the highest estimates of heterosexual couples in relationships that are not stated to be monogamous.
- Colleen Hoff, Sean Beougher, Deepalika Chakravarty, Lynae Darbes, Torsten Neilands. (2010) “Relationship Characteristics and Motivations behind Agreements among Gay Male Couples: Differences by Agreement Type and Couple Serostatus.” AIDS Care. Vol. 22, No. 7, pp. 827-835.
- Roger Rubin. (2001) “Alternative Lifestyles Revisited, or Whatever Happened to Swingers, Group Marriages, and Communes?” Journal of Family Issues. Vol. 22, No. 6, pp. 711-726.
329. Richard Wolitski. (2006) “The Emergence of Barebacking among Gay and Bisexual Men in the United States: A Public Health Perspective.” (Perry Halkitis, Leo Wilton, Jack Drescher, Eds.) In “Barebacking: Psychosocial and Public Health Approaches.” Haworth Medical Press. Binghamton, New York.
330. Almost half of all gay men surveyed agreed with the statement: “My membership in the gay community is an important reflection of who I am.”
- Gregory Herek, Aaron Norton, Thomas Allen, Charles Sims. (2010) “Demographic, Psychological, and Social Characteristics of Self-Identified Lesbian, Gay, and Bisexual Adults in a US Probability Sample.” Sexuality Research and Social Policy. Vol. 7, No. 3, pp. 176-200.
331. This research is central to the conclusion that a social movement as described in this story could lead to people acting more responsibly – more specifically, using condoms more often.



This meta-study examined 67 independent samples, which measured 23 psychosocial predictors of intentions to use condoms (which, in turn, is a strong predictor of actual use).

According to this research, what matters most to people, more than knowledge about HIV/AIDS, and even more than the belief that condoms could save their own lives, are their perceptions about whether they think their sexual partners think it is normal to use one. That is, all things considered, the factor that would most likely make someone likely to intend to use a condom is believing their partner will expect to use one. Also high on the list, just below subjective norms (e.g., “Most people who are important to me think that I should use a condom the next time that I have sex with someone new”) and attitudes toward condoms, is previous condom usage. Taken together, the data suggests that, should it become widely believed that most prospective partners would expect to use a condom, it would lead far more people to use them. As more people used them, previous usage would also reinforce their intentions, and the resulting dynamic would make the behavior self-sustaining.

The conclusions drawn from the theory of reasoned action and the theory of planned behavior can also be applied to other sexual behavior presented in the context of safety and responsibility, such as delaying sex for a prescribed period of time (e.g., “Most people who are important to me think that I should wait three months before having sex with someone new”).

Paschal Sheeran, Steven Taylor. (1999) “Predicting Intentions to Use Condoms: A Meta-Analysis and Comparison of the Theories of Reasoned Action and Planned Behavior.” *Journal of Applied Social Psychology*. Vol. 29, No. 8, pp. 1624-1675.

Also, research on social norms as they specifically relate to health decisions made in private:

Kevin McCaul, Ann Sandgren, Katherine O’Neill, Verlin Hinsz. (1993) “The Value of the Theory of Planned Behavior, Perceived Control, and Self-Efficacy for Predicting Health-Protective Behaviors.” *Basic and Applied Social Psychology*. Vol. 14, No. 2, pp. 231-252.

- 332. Peter Bearman, Hannah Brückner. (2001) “Promising the Future: Virginity Pledges and First Intercourse.” *American Journal of Sociology*. Vol. 106, No. 4, pp. 859-911.
- 333. Centers for Disease Control and Prevention. (2010) “HIV in the United States.” Centers for Disease Control and Prevention. Atlanta, GA.
- 334. 75% of single parents are female. (These statistics include a small portion of people of either sex who purposefully become single parents.)  
US Census Bureau. (2010) “Family Type by Presence and Age of Own Children.” US Department of Commerce, Economics and Statistics Administration. Washington, DC.
- 335. Thomas Quinn, Julie Overbaugh. (2005) “HIV/AIDS in Women: An Expanding Epidemic.” *Science*. Vol. 308, No. 5728, pp. 1582-1583.

Beena Varghese, Julie Maher, Thomas Peterman, Bernard Branson, Richard Steketee. (2002) “Reducing the Risk of Sexual HIV Transmission: Quantifying the Per-Act Risk for HIV on the Basis of Choice of Partner, Sex Act, and Condom Use.” *Sexually Transmitted Diseases*. Vol. 29, No. 1, pp. 38-43.

In 2009, roughly twice as many women contracted HIV from men as men got it from women.

Centers for Disease Control and Prevention. (2011) “Diagnoses of HIV Infection and AIDS in the United States and Dependent Areas, 2009.” *HIV Surveillance Report*. Vol. 21. Centers for Disease Control and Prevention. Atlanta, GA.

336. Roy Baumeister, Kathleen Catanese, Kathleen Vohs. (2001) “Is There a Gender Difference in Strength of Sex Drive? Theoretical Views, Conceptual Distinctions, and a Review of Relevant Evidence.” *Personality and Social Psychology Review*. Vol. 5, No. 3, pp. 242-273.
337. Ann Blanc. (2001) “The Effect of Power in Sexual Relationships on Sexual and Reproductive Health: An Examination of the Evidence.” *Studies in Family Planning*. Vol. 32, No. 3, pp. 189-213.

Among many other problems, some of these double standards lead women to pretend not to want sex even when they do, which leads to a host of other problems.

Charlene Muehlenhard, Lisa Hollabaugh. (1988) “Do Women Sometimes Say No When They Mean Yes? The Prevalence and Correlates of Women’s Token Resistance to Sex.” *Journal of Personality and Social Psychology*. Vol. 54, No. 5, pp. 872-879.

338. Pepper Schwartz, Virginia Rutter. (1998). “The Gender of Sexuality.” Pine Forge Press. Thousand Oaks, CA.
339. This study defines a “hookup” as “a sexual encounter, usually lasting only one night, between two people who are strangers or brief acquaintances.” Researchers found that 78% of college students had participated in a hookup. Half of the students who said they experienced hookup sex said they never saw their sexual partner again.

Elizabeth Paul, Brian McManus, Allison Hayes. (2000) “Hookups’: Characteristics and Correlates of College Students’ Spontaneous and Anonymous Sexual Experiences.” *Journal of Sex Research*. Vol. 37, No. 1, pp. 76-88.

340. Catherine Grello, Deborah Welsh, Melinda Harper. (2006) “No Strings Attached: The Nature of Casual Sex in College Students.” *The Journal of Sex Research*. Vol. 43, No. 3, pp. 255-267.
341. In this study of college students who had experienced a one-night stand, males rated their experiences overwhelmingly more positively than women. Men were also likely to secretly want their friends to know, and their only significant worry was causing a pregnancy or catching a disease.

In the same study, most women regretted the experience overall and would not want to repeat it. The biggest difference between the sexes was how much women regretted it because they felt used. Women also regretted letting themselves down and worried their reputations would be damaged.

Anne Campbell. (2008) "The Morning After the Night Before: Affective Reactions to One-Night Stands among Mated and Unmated Women and Men." *Human Nature*. Vol. 19, No. 2, pp. 157-173.

342. The differences between male and female attitudes toward sex is a widely researched topic in psychology. This piece explores one of the most major differences.

Roy Baumeister. (2000) "Gender Differences in Erotic Plasticity: The Female Sex Drive as Socially Flexible and Responsive." *Psychological Bulletin*. Vol. 126, No. 3, pp. 347-374.

343. Emily Impett, Letitia Anne Peplau. (2002) "Why Some Women Consent to Unwanted Sex with a Dating Partner: Insights from Attachment Theory." *Psychology of Women Quarterly*. Vol. 26, No. 4, pp. 360-370.

Lucia O'Sullivan, Elizabeth Rice Allgeier. (1998) "Feigning Sexual Desire: Consenting to Unwanted Sexual Activity in Heterosexual Dating Relationships." *The Journal of Sex Research*. Vol. 35, No. 3, pp. 234-243.

Sarah Walker. (1997) "When 'No' Becomes 'Yes': Why Girls and Women Consent to Unwanted Sex." *Applied and Preventive Psychology*. Vol. 6, No. 3, pp. 157-166.

344. William Flack, Kimberly Daubman, Marcia Caron, Jenica Asadorian, Nicole D'Aureli, Shannon Gigliotti, Anna Hall, Sarah Kiser, Erin Stine. (2007) "Risk Factors and Consequences of Unwanted Sex among University Students: Hooking Up, Alcohol, and Stress Response." *Journal of Interpersonal Violence*. Vol. 22, No. 2, pp. 139-157.

345. Elaine Eshbaugh, Gary Gute. (2008) "Hookups and Sexual Regret among College Women." *The Journal of Social Psychology*. Vol. 148, No. 1, pp. 77-90.

This view that "hooking up" is harmless may be furthered by careless mainstream media reporting about research that finds that it is not as harmful as previously thought, which some misinterpret as meaning it is not harmful.

For example, this research finds that casual sex does not cause permanent psychological damage.

Marla Eisenberg, Diann Ackard, Michael Resnick, Dianne Neumark-Sztainer. (2009) "Casual Sex and Psychological Health among Young Adults: Is Having 'Friends with Benefits' Emotionally Damaging?" *Perspectives on Sexual and Reproductive Health*. Vol. 41, No. 4, pp. 231-237.

This research finds that people who do not value relationships as much tend toward shorter, more casual relationships. Among people open to long-term

relationships, having sex quickly with a new partner does not doom a relationship.

Anthony Paik. (2010) “Hookups, Dating, and Relationship Quality: Does the Type of Sexual Involvement Matter?” *Social Science Research*. Vol. 39, No. 5, pp. 739-753.

346. 70% of teen girls believe it is very important that teens be encouraged to delay sex.

Bill Albert. (2010) “With One Voice 2010: America’s Adults and Teens Sound Off about Teen Pregnancy.” *The National Campaign to Prevent Teen and Unplanned Pregnancy*. Washington, DC.

347. Roy Baumeister, Kathleen Catanese, Kathleen Vohs. (2001) “Is There a Gender Difference in Strength of Sex Drive? Theoretical Views, Conceptual Distinctions, and a Review of Relevant Evidence.” *Personality and Social Psychology Review*. Vol. 5, No. 3, pp. 242-273.
348. Roy Baumeister, Kathleen Vohs. (2004) “Sexual Economics: Sex as Female Resource for Social Exchange in Heterosexual Interactions.” *Personality and Social Psychology Review*. Vol. 8, No. 4, pp. 339-363.

Note: With the obvious exception of prostitution, the researchers do not suggest men buy sex with money directly, but rather expend other resources, such as time and material goods, in a more general effort to attain it.

349. Clark Warburton. (1932) “The Economic Results of Prohibition.” *Columbia University Press*. New York, NY.
350. Steven Landsburg. (2007) “More Sex Is Safer Sex: The Unconventional Wisdom of Economics.” *Simon & Schuster*. New York, NY.
351. James Prescott. (1975) “Body Pleasure and the Origins of Violence.” *Bulletin of the Atomic Scientists*. Vol. 31, No. 9, pp. 10-20.
352. Martin Weinberg, Ilsa Lottes, Frances Shaver. (2000) “Sociocultural Correlates of Permissive Sexual Attitudes: A Test of Reiss’s Hypotheses about Sweden and the United States.” *The Journal of Sex Research*. Vol. 37, No. 1, pp. 44-52.
- Eric Widmer, Judith Treas, Robert Newcomb. (1998) “Attitudes Toward Nonmarital Sex in 24 Countries.” *Journal of Sex Research*. Vol. 35, No. 4, pp. 349-358.
353. United Nations. (2010) “Homicide Statistics, Trends (2003-2008).” *United Nations Office on Drugs and Crime*. Vienna, Austria.
354. Caryl Rusbult. (1983) “A Longitudinal Test of the Investment Model: The Development (and Deterioration) of Satisfaction and Commitment in Heterosexual Involvements.” *Journal of Personality and Social Psychology*. Vol. 45, No. 1, pp. 101-117.
355. Shari Dworkin, Lucia O’Sullivan. (2005) “Actual Versus Desired Initiation Patterns among a Sample of College Men: Tapping Disjunctures within

Traditional Male Sexual Scripts.” *The Journal of Sex Research*. Vol. 42, No. 2, pp. 150-158.

David Wyatt Seal, Anke Ehrhardt. (2003) “Masculinity and Urban Men: Perceived Scripts for Courtship, Romantic, and Sexual Interactions with Women.” *Culture, Health & Sexuality*. Vol. 5, No. 4, pp. 295-319.

Arland Thornton, Linda Young-DeMarco. (2001) “Four Decades of Trends in Attitudes toward Family Issues in the United States: The 1960s through the 1990s.” *Journal of Marriage and Family*. Vol. 63, No. 4, pp. 1009-1037.

Jean Twenge. (1997) “Attitudes toward Women, 1970–1995: A Meta-Analysis.” *Psychology of Women Quarterly*. Vol. 21, No. 1, pp. 35-51.

James Check, Neil Malamuth. (1985) “An Empirical Assessment of Some Feminist Hypotheses about Rape.” *International Journal of Women’s Studies*. Vol. 8, No. 4, pp. 414-423.

John Collins, Judith Kennedy, Ronald Francis. (1976) “Insights into a Dating Partner’s Expectations of How Behavior Should Ensurue during the Courtship Process.” *Journal of Marriage and Family*. Vol. 38, No. 2, pp. 373-378.

356. 50% of teen boys believe it is very important that teens be encouraged to delay sex. (Compared to 70% of teen girls.)

Bill Albert. (2010) “With One Voice 2010: America’s Adults and Teens Sound Off about Teen Pregnancy.” *The National Campaign to Prevent Teen and Unplanned Pregnancy*. Washington, DC.

357. Pamela Regan, Lauren Levin, Susan Sprecher, F. Scott Christopher, Rodney Cate. (2000) “Partner Preferences: What Characteristics Do Men and Women Desire in Their Short-Term Sexual and Long-Term Romantic Partners?” *Journal of Psychology & Human Sexuality*. Vol. 12, No. 3, pp. 1-21.

Douglas Kenrick, Edward Sadalla, Gary Groth, Melanie Trost. (1990) “Evolution, Traits, and the Stages of Human Courtship: Qualifying the Parental Investment Model.” *Journal of Personality*. Vol. 58, No. 1, pp. 97-116.

358. Both of these strategies teach more than this, but boiled down, these are the most fundamental requirements.
359. Edwin Locke, Gary Latham. (2002) “Building a Practically Useful Theory of Goal Setting and Task Motivation: A 35-Year Odyssey.” *American Psychologist*. Vol. 57, No. 9, pp. 705-717.

360. While most research in the field of goal-setting has historically revolved around a work environment, this piece addresses setting goals to change behavior to improve health.

Victor Strecher, Gerard Seijts, Gerjo Kok, Gary Latham, Russell Glasgow, Brenda DeVellis, Ree Meertens, David Bulger. (1995) “Goal Setting as a Strategy for Health Behavior Change.” *Health Education Quarterly*. Vol. 22, No. 2, pp. 190-200.

361. Edwin Locke, Gary Latham. (1990) “A Theory of Goal Setting & Task Performance.” Prentice Hall. Englewood Cliffs, NJ.

This concept has been supported in hundreds of independent studies.

Gary Latham, Edwin Locke. (1991) “Self-Regulation through Goal Setting.” *Organizational Behavior and Human Decision Processes*. Vol. 50, No. 2, pp. 212-247.

362. Robert Wood, Anthony Mento, Edwin Locke. (1987) “Task Complexity as a Moderator of Goal Effects: A Meta-Analysis.” *Journal of Applied Psychology*. Vol. 72, No. 3, pp. 416-425.

Edwin Locke, Elizabeth Frederick, Cynthia Lee, Philip Bobko. (1984) “Effect of Self-Efficacy, Goals, and Task Strategies on Task Performance.” *Journal of Applied Psychology*. Vol. 69, No. 2, pp. 241-251.

363. Icek Ajzen. (2002) “Perceived Behavioral Control, Self-Efficacy, Locus of Control, and the Theory of Planned Behavior.” *Journal of Applied Social Psychology*. Vol. 32, No. 4, pp. 665-668.

364. Mark Conner, Paul Norman. (Eds.) (2005) “Predicting Health Behaviour: Research and Practice with Social Cognition Models.” Second Edition. Open University Press. Berkshire, England.

Victor Strecher, Gerard Seijts, Gerjo Kok, Gary Latham, Russell Glasgow, Brenda DeVellis, Ree Meertens, David Bulger. (1995) “Goal Setting as a Strategy for Health Behavior Change.” *Health Education Quarterly*. Vol. 22, No. 2, pp. 190-200.

Gary Latham, Edwin Locke. (1991) “Self-Regulation through Goal Setting.” *Organizational Behavior and Human Decision Processes*. Vol. 50, No. 2, pp. 212-247.

365. Essentially all Safe Sex programs talked about condoms, but only half demonstrated the correct way to use them.

Jacqueline Darroch, David Landry, Susheela Singh. (2000) “Changing Emphases in Sexuality Education In U.S. Public Secondary Schools, 1988-1999.” *Family Planning Perspectives*. Vol. 32, No. 6, pp. 204-212.

366. Eight in 10 teens said they knew everything they needed to avoid an unplanned pregnancy, yet half said they knew nothing or little about how to use condoms.

Bill Albert. (2010) “With One Voice 2010: America’s Adults and Teens Sound Off about Teen Pregnancy.” *The National Campaign to Prevent Teen and Unplanned Pregnancy*. Washington, DC.

367. Gary Latham, Edwin Locke. (1991) “Self-Regulation through Goal Setting.” *Organizational Behavior and Human Decision Processes*. Vol. 50, No. 2, pp. 212-247.

368. Diana Elliott, Tavia Simmons. (2011) “Marital Events of Americans: 2009.” Report ACS-13. US Census Bureau. Washington, DC.

US Census Bureau. (2011) “2010 Current Population Survey.” US Department of Commerce, Economics and Statistics Administration. Washington, DC.

US Census Bureau. (2010) “2009 American Community Survey.” US Department of Commerce, Economics and Statistics Administration. Washington, DC.

These findings were widely reported.

Sabrina Tavernise. (2011) “Married Couples Are No Longer a Majority, Census Finds.” *The New York Times*. May 26, 2011. [Link](#)

Carol Morello. (2011) “As U.S. Marriage Rate Declines, Mid-Atlantic Is Mostly Average.” *The Washington Post*. Aug. 25, 2011. [Link](#)

369. Elizabeth Caucutt, Nezih Guner, John Knowles. (2002) “Why Do Women Wait? Matching, Wage Inequality, and the Incentives for Fertility Delay.” *Review of Economic Dynamics*. Vol. 5, No. 4, pp. 815-855.

Arland Thornton, Linda Young-DeMarco. (2001). “Four Decades of Trends in Attitudes toward Family Issues in the United States: The 1960s through the 1990s.” *Journal of Marriage and the Family*. Vol. 63, No. 4, pp. 1009-1037.

370. The median age of first marriage increased by one every few years.

Median age of first marriage in the United States:

1975: 23.5; 1979: 24.4; 1985: 25.5, 1991: 26.3. (Male)

1975: 21.1; 1979: 22.1; 1985: 23.0, 1991: 24.1. (Female)

US Census Bureau. (2004) “Estimated Median Age at First Marriage, by Sex: 1890 to Present.” US Department of Commerce, Economics and Statistics Administration. Washington, DC.

371. Median age for first marriage was 28.4 for males and 26.5 for females. Both ages were closer to 30 than 20 and both exhibited a sharp upward trend.

US Census Bureau. (2010) “2009 American Community Survey.” Table R1204, R1205. US Department of Commerce, Economics and Statistics Administration. Washington, DC.

372. Arnaud D’Argembeau, Gui Xue, Zhong-Lin Lu, Martial Van der Linden, Antoine Bechara. (2008) “Neural Correlates of Envisioning Emotional Events in the Near and Far Future.” *NeuroImage*. Vol. 40, No. 1, pp. 398-407.

373. Marc Wittmann, David Leland, Martin Paulus. (2007) “Time and Decision Making: Differential Contribution of the Posterior Insular Cortex and the Striatum during a Delay Discounting Task.” *Experimental Brain Research*. Vol. 179, No. 4, pp. 643-653.

Brian Knutson, Jeffrey Cooper. (2005) “Functional Magnetic Resonance Imaging of Reward Prediction.” *Current Opinion in Neurology*. Vol. 18, No. 4, pp. 411-417.

Samuel McClure, David Laibson, George Loewenstein, Jonathan Cohen. (2004) "Separate Neural Systems Value Immediate and Delayed Monetary Rewards." *Science*. Vol. 306, No. 5695, pp. 503-507.

374. Richard Meyer. (1993) "Preferences over Time." (Ralph Keeney, Howard Raiffa, Eds.) In "Decisions with Multiple Objectives: Preferences and Value Tradeoffs." Cambridge University Press. Cambridge, England.

Note: Originally published in 1976.

375. Kris Kirby, Nino Marakovic. (1995) "Modeling Myopic Decisions: Evidence for Hyperbolic Delay-Discounting within Subjects and Amounts." *Organizational Behavior and Human Decision Processes*. Vol. 64, No. 1, pp. 22-30.
376. After lengthening throughout adolescence and early adulthood, future planning becomes gradually shorter as people get older (and closer to the end of their lives).  
Jari-Erik Nurmi. (1991) "How Do Adolescents See Their Future? A Review of the Development of Future Orientation and Planning." *Developmental Review*. Vol. 11, No. 1, pp. 1-59.
377. Kathleen Vohs, Brandon Schmeichel. (2003) "Self-Regulation and the Extended Now: Controlling the Self Alters the Subjective Experience of Time." *Journal of Personality and Social Psychology*. Vol. 85, No. 2, pp. 217-230.
378. Jamie Sayen. (1985) "Einstein in America: The Scientist's Conscience in the Age of Hitler and Hiroshima." Crown. New York, NY.
379. This piece makes several complex topics very accessible:  
Shelley Taylor, Lien Pham, Inna Rivkin, David Armor. (1998) "Harnessing the Imagination: Mental Simulation, Self-Regulation, and Coping." *American Psychologist*. Vol. 53, No. 4, pp. 429-439.
380. Daniel Kahneman, Dale Miller. (1986) "Norm Theory: Comparing Reality to Its Alternatives." *Psychological Review*. Vol. 93, No. 2, pp. 136-153.
381. Lawrence Finer. (2007) "Trends in Premarital Sex in the United States, 1954-2003." *Public Health Reports*. Vol. 122, No. 1, pp. 73-78.
382. 78.4% of Americans identified as belonging to a Christian faith.  
The Pew Forum on Religion & Public Life. (2008) "U.S. Religious Landscape Survey." Pew Research Center. Washington, DC.
383. Based on self-reported data, i.e., those who admit to having premarital sex. It is likely that even more did so but did not admit it.
384. Mark Regnerus. (2009) "The Case for Early Marriage." *Christianity Today*. Vol. 53, No. 8. Aug. 31, 2009. [Link](#)
385. Matthew Bramlett, William Mosher. (2002) "Cohabitation, Marriage, Divorce and Remarriage in the United States." *Vital and Health Statistics*. Vol. 23, No. 22, pp. 1-32.



386. Calculations based on data cited previously. Average age of marriage in 2009 (~27), thus born in 1982. Average age of marriage in 1975 (~22), thus born in 1953. In 1975, women married ~3 years after high school; men ~5 years after. In 2009, women married ~8 years after high school; men ~10.

387. Kay Herting Wahl, Anne Blackhurst. (2000) "Factors Affecting the Occupational and Educational Aspirations of Children and Adolescents." *Professional School Counseling*. Vol. 3, No. 5, pp. 367-374.

Even among those who achieve a higher education, it is difficult to predict the future. In a study of Americans who attained a bachelor's degree in 1993, only four years after graduation, almost half were working in fields unrelated to their education.

Tiffany Stringer. (2000) "Four Years after Graduation: The Class of 1993." *Occupational Outlook Quarterly*. Vol. 44, No. 4, pp. 17-29. US Department of Labor, Bureau of Labor Statistics. Washington, DC.

388. Mark Alicke. (1985) "Global Self-Evaluation as Determined by the Desirability and Controllability of Trait Adjectives." *Journal of Personality and Social Psychology*. Vol. 49, No. 6, pp. 1621-1630.

389. It has been argued that self-enhancement is unique to Western cultures, and is not found in Asian cultures.

Steven Heine, Darrin Lehman, Hazel Rose Markus, Shinobu Kitayama. (1999) "Is There a Universal Need for Positive Self-Regard?" *Psychological Review*. Vol. 106, No. 4, pp. 766-794.

East Asians are indeed more likely to take more personal responsibility for their actions.

Incheol Choi, Richard Nisbett, Ara Norenzayan. (1999) "Causal Attribution across Cultures: Variation and Universality." *Psychological Bulletin*. Vol. 125, No. 1, pp. 47-63.

However, those in Eastern cultures typically have a more collective, less unique sense of self. They do still self-enhance, but as a member of a group rather than as an individual.

Constantine Sedikides, Lowell Gaertner, Yoshiyasu Toguchi. (2003) "Pancultural Self-Enhancement." *Journal of Personality and Social Psychology*. Vol. 84, No. 1, pp. 60-79.

Constantine Sedikides, Lowell Gaertner, Jack Vevea. (2005) "Pancultural Self-Enhancement Reloaded: A Meta-Analytic Reply to Heine." *Journal of Personality and Social Psychology*. Vol. 89, No.41, pp. 539-551.

390. Justin Kruger. (1999) "Lake Wobegon Be Gone! The 'Below-Average Effect' and the Egocentric Nature of Comparative Ability Judgments." *Journal of Personality and Social Psychology*. Vol. 77, No. 2, pp. 221-232.

391. David Dunning, Judith Meyerowitz, Amy Holzberg. (1989) "Ambiguity and Self-Evaluation: The Role of Idiosyncratic Trait Definitions in Self-Serving

Assessments of Ability.” *Journal of Personality and Social Psychology*. Vol. 57, No. 6, pp. 1082-1090.

Justin Kruger. (1999) “Lake Wobegon Be Gone! The ‘Below-Average Effect’ and the Egocentric Nature of Comparative Ability Judgments.” *Journal of Personality and Social Psychology*. Vol. 77, No. 2, pp. 221-232.

392. Mark Alicke, Olesya Govorun. (2005) “The Better-Than-Average Effect.” (Mark Alicke, David Dunning, Joachim Krueger, Eds.) In “The Self in Social Judgment: Studies in Self and Identity.” Psychology Press, New York.
393. Melvin Snyder, Walter Stephan, David Rosenfield. (1976) “Egotism and Attribution.” *Journal of Personality and Social Psychology*. Vol. 33, No. 4, pp. 435-441.
394. Gifford Weary Bradley. (1978) “Self-Serving Biases in the Attribution Process: A Reexamination of the Fact or Fiction Question.” *Journal of Personality and Social Psychology*. Vol. 36, No. 1, pp. 56-71.
395. Justin Kruger, Thomas Gilovich. (2004) “Actions, Intentions, and Self-Assessment: The Road to Self-Enhancement Is Paved with Good Intentions.” *Personality and Social Psychology Bulletin*. Vol. 30, No. 3, pp. 328-339.
396. Daniel Gilbert, Patrick Malone. (1995) “The Correspondence Bias.” *Psychological Bulletin*. Vol. 117, No. 1, pp. 21-38.

Note: The correspondence bias is also known as the fundamental attribution error.

397. Emily Pronin, Daniel Lin, Lee Ross. (2002) “The Bias Blind Spot: Perceptions of Bias in Self Versus Others.” *Personality and Social Psychology Bulletin*. Vol. 28, No. 3, pp. 369-381.
398. Shelley Taylor. (1991) “Asymmetrical Effects of Positive and Negative Events: The Mobilization-Minimization Hypothesis.” *Psychological Bulletin*. Vol. 110, No. 1, pp. 67-85.
399. The United States has the second highest traffic-related death rate (per capita) of all developed countries. (Greece has the highest.)

World Health Organization. (2009) “Global Status Report on Road Safety: Time for Action.” World Health Organization. Geneva, Switzerland.

400. 93% of American drivers think they are among the top 50% of drivers when evaluating driving skill.

Ola Svenson. (1981) “Are We All Less Risky and More Skillful Than Our Fellow Drivers?” *Acta Psychologica*. Vol. 47, No. 2, pp. 143-148.

A later study found that the vast majority rated themselves as above average, but also below a “very good driver.”

Iain McCormick, Frank Walkey, Dianne Green. (1986) “Comparative Perceptions of Driver Ability –A Confirmation and Expansion.” *Accident Analysis & Prevention*. Vol. 18, No. 3, pp. 205-208.

401. Jean Halliday. (2012) “Drivers Want Alert Options, Ford-Backed Study Finds.” *Forbes*. Aug. 28, 2012. [Link](#)
402. Shelley Taylor, Jonathon Brown. (1988) “Illusion and Well-Being: A Social Psychological Perspective on Mental Health.” *Psychological Bulletin*. Vol. 103, No. 2, pp. 193-210.
403. Individualism is a predominantly Western belief, particularly strong in America.  
 Harry Triandis, Robert Bontempo, Marcelo Villareal, Masaaki Asai, Nydia Lucca. (1988) “Individualism and Collectivism: Cross-Cultural Perspectives on Self-Ingroup Relationships.” *Journal of Personality and Social Psychology*. Vol. 54, No. 2, pp. 323-338.
404. Neil Weinstein. (1987) “Unrealistic Optimism about Susceptibility to Health Problems: Conclusions from a Community-Wide Sample.” *Journal of Behavioral Medicine*. Vol. 10, No. 5, pp. 481-500.  
 Neil Weinstein. (1984) “Why It Won’t Happen to Me: Perceptions of Risk Factors and Susceptibility.” *Health Psychology*. Vol. 3, No. 5, pp. 431-457.  
 Neil Weinstein. (1980) “Unrealistic Optimism about Future Life Events.” *Journal of Personality and Social Psychology*. Vol. 39, No. 5, pp. 806-820.
405. Author’s Note: We tend to underestimate the likelihood of most risky events, unless that particular event has affected someone close to us, in which case we tend to overestimate it instead. Either way, we’re wrong.  
 Linda Perloff, Barbara Fetzler. (1986) “Self-Other Judgments and Perceived Vulnerability to Victimization.” *Journal of Personality and Social Psychology*. Vol. 50, No. 3, pp. 502-510.
406. Frank McKenna. (1993) “It Won’t Happen to Me: Unrealistic Optimism or Illusion of Control?” *British Journal of Psychology*. Vol. 84, No. 1, pp. 39-50.
407. Daniel Lapsley, Patrick Hill. (1987) “Subjective Invulnerability, Optimism Bias and Adjustment in Emerging Adulthood.” *Journal of Youth and Adolescence*. Vol. 39, No. 8, pp. 847-857.
408. Emily Pronin, Matthew Kugler. (2010) “People Believe They Have More Free Will Than Others.” *Proceedings of the National Academy of Sciences*. Vol. 107, No. 52, pp. 22469-22474.
409. Loran Nordgren, Frenk van Harreveld, Joop van der Pligt. (2009) “The Restraint Bias: How the Illusion of Self-Restraint Promotes Impulsive Behavior.” *Psychological Science*. Vol. 20, No. 12, pp. 1523-1528.
410. Janet Polivy, C. Peter Herman. (2002) “If at First You Don’t Succeed: False Hopes of Self-Change.” *American Psychologist*. Vol. 57, No. 9, pp. 677-689.
411. George Loewenstein. (1996) “Out of Control: Visceral Influences on Behavior.” *Organizational Behavior and Human Decision Processes*. Vol. 65, No. 3, pp. 272-292.

412. A special issue of the *Journal of Behavioral Decision Making* examines the role of emotion on decision-making. The following is a good overview of the articles:

Ellen Peters, Daniel Västfjäll, Tommy Gärling, Paul Slovic. (2006) "Affect and Decision Making: A 'Hot' Topic." *Journal of Behavioral Decision Making*. Vol. 19, No. 2, pp. 79-85.

Most conclusions can be generalized, but the most relevant articles in this context are:

Dan Ariely, George Loewenstein. (2006) "The Heat of the Moment: The Effect of Sexual Arousal on Sexual Decision Making." *Journal of Behavioral Decision Making*. Vol. 19, No. 2, pp. 87-98.

Peter Ditto, David Pizarro, Eden Epstein, Jill Jacobson, Tara MacDonald. (2006) "Visceral Influences on Risk-Taking Behavior." *Journal of Behavioral Decision Making*. Vol. 19, No. 2, pp. 99-113.

413. George Loewenstein. (1996) "Out of Control: Visceral Influences on Behavior." *Organizational Behavior and Human Decision Processes*. Vol. 65, No. 3, pp. 272-292.
414. Mark Conner, Paul Norman. (Eds.) (2005) "Predicting Health Behaviour: Research and Practice with Social Cognition Models." Second Edition. Open University Press. Berkshire, England.
415. Marc Wittmann, David Leland, Martin Paulus. (2007) "Time and Decision Making: Differential Contribution of the Posterior Insular Cortex and the Striatum During a Delay Discounting Task." *Experimental Brain Research*. Vol. 179, No. 4, pp. 643-653.
- Brian Knutson, Jeffrey Cooper. (2005) "Functional Magnetic Resonance Imaging of Reward Prediction." *Current Opinion in Neurology*. Vol. 18, No. 4, pp. 411-417.
- Samuel McClure, David Laibson, George Loewenstein, Jonathan Cohen. (2004) "Separate Neural Systems Value Immediate and Delayed Monetary Rewards." *Science*. Vol. 306, No. 5695, pp. 503-507.
416. George Loewenstein, Jennifer Lerner. (2003) "The Role of Affect in Decision Making." (Richard Davidson, Klaus Scherer, H. Hill Goldsmith. Eds.) In "Handbook of Affective Sciences." Oxford University Press. New York, NY.
417. John Bargh, Melissa Ferguson. (2000) "Beyond Behaviorism: On the Automaticity of Higher Mental Processes." *Psychological Bulletin*. Vol. 126, No. 6, pp. 925-945.
- John Bargh, Tanya Chartrand, (1999) "The Unbearable Automaticity of Being." *American Psychologist*. Vol. 54, No. 7, pp. 462-479.
418. Antoine Bechara, Antonio Damásio, Hanna Damásio, Steven Anderson. (1994). "Insensitivity to Future Consequences Following Damage to Human Prefrontal Cortex." *Cognition*. Vol. 50, No. 1, pp. 7-15.

419. Chun Siong Soon, Marcel Brass, Hans-Jochen Heinze, John-Dylan Haynes. (2008) "Unconscious Determinants of Free Decisions in the Human Brain." *Nature Neuroscience*. Vol. 11, No. 5, pp. 543-545.
420. Maurizio Corbetta, Gordon Shulman. (2002) "Control of Goal-Directed and Stimulus-Driven Attention in the Brain." *Nature Reviews Neuroscience*. Vol. 3, No. 3, pp. 201-215.

Note: To be perfectly accurate, the areas are not shut off so much as their input is ignored.

421. Specifically, the orbitofrontal cortex and the hypothalamus.

Edmund Rolls. (1999) "The Brain and Emotion." Oxford University Press. New York, NY.

422. Earl Miller, Jonathan Cohen. (2001) "An Integrative Theory of Prefrontal Cortex Function." *Annual Review of Neuroscience*. Vol. 24, No. 1, pp. 167-202.
423. Dan Ariely, George Loewenstein. (2006) "The Heat of the Moment: The Effect of Sexual Arousal on Sexual Decision Making." *Journal of Behavioral Decision Making*. Vol. 19, No. 2, pp. 87-98.

Author's Note: For an extensive overview of this research (that is also far better written than mine), read the following book, which I wish I had read before writing this section:

Dan Ariely. (2008) "Predictably Irrational: The Hidden Forces That Shape Our Decisions." HarperCollins. New York, NY.

424. Peter Ditto, David Pizarro, Eden Epstein, Jill Jacobson, Tara MacDonald. (2006) "Visceral Influences on Risk-Taking Behavior." *Journal of Behavioral Decision Making*. Vol. 19, No. 2, pp. 99-113.

Dan Ariely, George Loewenstein. (2006) "The Heat of the Moment: The Effect of Sexual Arousal on Sexual Decision Making." *Journal of Behavioral Decision Making*. Vol. 19, No. 2, pp. 87-98.

425. Mark Muraven, Roy Baumeister. (2000) "Self-Regulation and Depletion of Limited Resources: Does Self-Control Resemble a Muscle?" *Psychological Bulletin*. Vol. 126, No. 2, pp. 247-259.

Note that although ego depletion is related to and resembles physical fatigue, they are separate phenomena.

Kathleen Vohs, Brian Glass, W. Todd Maddox, Arthur Markman. (2011) "Ego Depletion Is Not Just Fatigue: Evidence from a Total Sleep Deprivation Experiment." *Social Psychological and Personality Science*. Vol. 2, No. 2, pp. 166-173.

426. Mark Muraven, Roy Baumeister. (2000) "Self-Regulation and Depletion of Limited Resources: Does Self-Control Resemble a Muscle?" *Psychological Bulletin*. Vol. 126, No. 2, pp. 247-259.

427. Roy Baumeister, Todd Heatherton. (1996) "Self-Regulation Failure: An Overview." *Psychological Inquiry*. Vol. 7, No. 1, pp. 1-15.
428. Roy Baumeister, Jon Faber, Harry Wallace. (1999) "Coping and Ego Depletion: Recovery after the Coping Process." (C. R. Snyder, Ed.) In "Coping: The Psychology of What Works." Oxford University Press. New York, NY.
429. Kathleen Vohs, Roy Baumeister, Brandon Schmeichel, Jean Twenge, Noelle Nelson, Dianne Tice. (2008) "Making Choices Impairs Subsequent Self-Control: A Limited-Resource Account of Decision Making, Self-Regulation, and Active Initiative." *Journal of Personality and Social Psychology*. Vol. 94, No. 5, pp. 883-898.
- Roy Baumeister, Kathleen Vohs. (2007) "Self-Regulation, Ego Depletion, and Motivation." *Social and Personality Psychology Compass*. Vol. 1, No. 1, pp. 115-128.
- Roy Baumeister, Ellen Bratslavsky, Mark Muraven, Dianne Tice. (1998) "Ego Depletion: Is the Active Self a Limited Resource?" *Journal of Personality and Social Psychology*. Vol. 74, No. 5, pp. 1252-1265.
430. Matthew Gailliot, Roy Baumeister, C. Nathan DeWall, Jon Maner, E. Ashby Plant, Dianne Tice, Lauren Brewer, Brandon Schmeichel. (2007) "Self-Control Relies on Glucose as a Limited Energy Source: Willpower Is More Than a Metaphor." *Journal of Personality and Social Psychology*. Vol. 92, No. 2, pp. 325-336.
431. Norman Pecoraro, Faith Reyes, Francisca Gomez, Aditi Bhargava, Mary Dallman. (2004) "Chronic Stress Promotes Palatable Feeding, Which Reduces Signs of Stress: Feedforward and Feedback Effects of Chronic Stress." *Endocrinology*. Vol. 145, No. 8, pp. 3754-3762.
- Mary Dallman, Norman Pecoraro, Susanne la Fleur. "Chronic Stress and Comfort Foods: Self-Medication and Abdominal Obesity." *Brain, Behavior, and Immunity*. Vol. 19, No. 4, pp. 275-280.
432. A very approachable overview of decision fatigue:
- John Tierney. (2011) "Do You Suffer from Decision Fatigue?" *The New York Times*. Aug. 17, 2011. [Link](#)
433. The average person spends about 26.5 total years married.
- Rose Kreider, Jason Fields. (2002) "Number, Timing, and Duration of Marriages and Divorces: 1996." US Census Bureau. Washington, DC.
434. Jay Giedd, Liv Clasen, Rhoshel Lenroot, Dede Greenstein, Gregory Wallace, Sarah Ordaz, Elizabeth Molloy, Jonathan Blumenthal, Julia Tossell, Catherine Stayer, Carole Samango-Sprouse, Dinggang Shen, Christos Davatzikos, Deborah Merke, George Chrousos. (2006) "Puberty-Related Influences on Brain Development." *Molecular and Cellular Endocrinology*. Vols. 254-255, pp. 154-162.

435. Gabrielle Oettington. (1996) "Positive Fantasy and Motivation." (Peter Gollwitzer, John Bargh, Eds.) In "The Psychology of Action: Linking Cognition and Motivation to Behavior." The Guilford Press. New York, NY.
436. Susan Moore, Doreen Rosenthal. (1991) "Adolescent Invulnerability and Perceptions of AIDS Risk." *Journal of Adolescent Research*. Vol. 6, No. 2, pp. 164-180.
437. Roy Baumeister, Todd Heatherton, Dianne Tice. (1993) "When Ego Threats Lead to Self-Regulation Failure: Negative Consequences of High Self-Esteem." *Journal of Personality and Social Psychology*. Vol. 64, No. 1, pp. 141-156.
438. Edwin Locke, Karyll Shaw, Lise Saari, Gary Latham. (1981) "Goal Setting and Task Performance: 1969-1980." *Psychological Bulletin*. Vol. 90, No. 1, pp. 125-152.
439. W. Larry Gregory, Robert Cialdini, Kathleen Carpenter. (1982) "Self-Relevant Scenarios as Mediators of Likelihood Estimates and Compliance: Does Imagining Make It So?" *Journal of Personality and Social Psychology*. Vol. 43, No. 1, pp. 89-99.
440. Jonathan Freedman, Scott Fraser. (1966) "Compliance Without Pressure: The Foot-in-the-Door Technique." *Journal of Personality and Social Psychology*. Vol. 4, No. 2, pp. 195-202.
441. Leon Festinger. (1957) "A Theory of Cognitive Dissonance." Stanford University Press. Stanford, CA.
442. Tali Sharot, Benedetto De Martino, Raymond Dolan. (2009) "How Choice Reveals and Shapes Expected Hedonic Outcome." *The Journal of Neuroscience*. Vol. 29, No. 12, pp. 3760-3765.
443. Raymond Miller, Stephanie Brickman. (2004) "A Model of Future-Oriented Motivation and Self-Regulation." *Educational Psychology Review*, Vol. 16, No. 1, pp. 9-33.
444. Jennifer Stock, Daniel Cervone. (1990) "Proximal Goal-Setting and Self-Regulatory Processes." *Cognitive Therapy and Research*. Vol. 14, No. 5, pp. 483-498.
445. Mark Murave, Roy Baumeister, Dianne Tice. (1999) "Longitudinal Improvement of Self-Regulation through Practice: Building Self-Control Strength through Repeated Exercise." *The Journal of Social Psychology*. Vol. 139, No. 4, pp. 446-457.
- John Bargh, Melissa Ferguson. (2000) "Beyond Behaviorism: On the Automaticity of Higher Mental Processes." *Psychological Bulletin*. Vol. 126, No. 6, pp. 925-945.
446. Mark Conner, Paul Norman (Eds). (2005) "Predicting Health Behaviour." Second Edition. Open University Press. Berkshire, England.
447. Albert Bandura, Robert Wood. (1989) "Effect of Perceived Controllability and Performance Standards on Self-Regulation of Complex Decision

Making.” *Journal of Personality and Social Psychology*. Vol. 56, No. 5, pp. 805-814.

448. Interestingly, even though many later differences are thought to be the product of years of socialization, some gender differences in reactance can be observed even at this young age.

Sharon Brehm, Marsha Weinraub. (1977) “Physical Barriers and Psychological Reactance: 2-Year-Olds’ Responses to Threats to Freedom.” *Journal of Personality and Social Psychology*. Vol. 35, No. 11, pp. 830-836.

449. Kevin Woller, Walter Buboltz, James Loveland. (2007) “Psychological Reactance: Examination Across Age, Ethnicity, and Gender.” *The American Journal of Psychology*. Vol. 120, No. 1, pp. 15-24.

Claude Miller, Lindsay Lane, Leslie Deatrick, Alice Young, Kimberly Potts. (2007) “Psychological Reactance and Promotional Health Messages: The Effects of Controlling Language, Lexical Concreteness, and the Restoration of Freedom.” *Human Communication Research*. Vol. 33, No. 2, pp. 219-240.

450. Joel Brockner, Melissa Elkind. (1985) “Self-Esteem and Reactance: Further Evidence of Attitudinal and Motivational Consequences.” *Journal of Experimental Social Psychology*. Vol. 21, No. 4, pp. 346-361.
451. Edmund Thomas Dowd, Fred Wallbrown, Daniel Sanders, Janice Yesenosky. (1994) “Psychological Reactance and Its Relationship to Normal Personality Variables.” *Cognitive Therapy and Research*. Vol. 18, No. 6, pp. 601-612.
- E. Thomas Dowd, Fred Wallbrown. (1993) “Motivational Components of Client Reactance.” *Journal of Counseling & Development*. Vol. 71, No. 5, pp. 533-538.

452. For the foundation of reactance theory:

Jack Brehm. (1966) “A Theory of Psychological Reactance.” Academic Press. New York, NY.

Jack Brehm. (1972) “Response to Loss of Freedom: A Theory of Psychological Reactance.” General Learning Press. Morristown, NJ.

Sharon Brehm. (1976) “The Application of Social Psychology to Clinical Practice.” Hemisphere. Washington, DC.

Sharon Brehm, Jack Brehm. (1981). “Psychological Reactance: A Theory of Freedom and Control.” Academic Press. New York, NY.

453. “...attempts to restrict a person’s freedom often produce an anticonformity...”

Sharon Brehm, Jack Brehm. (1981). “Psychological Reactance: A Theory of Freedom and Control.” Academic Press. New York, NY.

454. Mark Twain. (1894) “Pudd’nhead Wilson.” Charles L. Webster & Company. New York, NY.



455. Brad Bushman, Joanne Cantor. (2003) "Media Ratings for Violence and Sex: Implications for Policymakers and Parents." *American Psychologist*. Vol. 58, No. 2, pp. 130-141.
- Brad Bushman, Angela Stack. (1996) "Forbidden Fruit Versus Tainted Fruit: Effects of Warning Labels on Attraction to Television Violence." *Journal of Experimental Psychology: Applied*. Vol. 2, No. 3, pp. 207-226.
456. In-line citations and parentheticals omitted from quote.
- Claude Miller, Lindsay Lane, Leslie Deatruck, Alice Young, Kimberly Potts. (2007) "Psychological Reactance and Promotional Health Messages: The Effects of Controlling Language, Lexical Concreteness, and the Restoration of Freedom." *Human Communication Research*. Vol. 33, No. 2, pp. 219-240.
457. D.A.R.E. America. (2009) "D.A.R.E. 2009 Annual Report: Empowering Children to Lead Safe and Healthy Lives." D.A.R.E. America. Los Angeles, CA.
458. David Satcher. (2001) "Youth Violence: A Report of the Surgeon General." US Department of Health and Human Services. Washington, DC.
459. Dennis Rosenbaum, Gordon Hanson. (1998) "Assessing the Effects of School-Based Drug Education: A Six-Year Multilevel Analysis of Project D.A.R.E." *Journal of Research in Crime and Delinquency*. Vol. 35, No. 4, pp. 381-412.
460. Dan Werb, Edward Mills, Kora DeBeck, Thomas Kerr, Julio Montaner, Evan Wood. (2011) "The Effectiveness of Anti-Illicit-Drug Public-Service Announcements: A Systematic Review and Meta-Analysis." *Journal of Epidemiology and Community Health*. Vol. 65, No. 10, pp. 834-840.
461. Martin Fishbein, Kathleen Hall-Jamieson, Eric Zimmer, Ina von Haeften, Robin Nabi. (2002) "Avoiding the Boomerang: Testing the Relative Effectiveness of Antidrug Public Service Announcements Before a National Campaign." *American Journal of Public Health*. Vol. 92, No. 2, pp. 238-245.
462. Joseph Grandpre, Eusebio Alvaro, Michael Burgoon, Claude Miller, John Hall. (2003) "Adolescent Reactance and Anti-Smoking Campaigns: A Theoretical Approach." *Health Communication*. Vol. 15, No. 3, pp. 349-366.
463. Centers for Disease Control and Prevention. (1994) "Preventing Tobacco Use among Young People: A Report of the Surgeon General." Centers for Disease Control and Prevention. Atlanta, GA.
464. This section does not refer to ads run by the American Legacy Foundation, which is a separate organization that receives funding from the tobacco industry as a result of the Master Settlement Agreement of 1998. This describes only ads created by tobacco companies.

Perhaps one of the most insidious effects of the Master Settlement Agreement was that it paved the way for tobacco companies to start airing television ads about cigarettes again (masquerading, of course, as anti-smoking ads), which they had been banned from doing since 1971.

465. "...increased exposure to tobacco company parent-targeted smoking prevention advertising was associated with lower recall of antitobacco advertising and stronger intentions to smoke in the future for all students."
- Melanie Wakefield, Yvonne Terry-McElrath, Sherry Emery, Henry Saffer, Frank Chaloupka, Glen Szczypka, Brian Flay, Patrick O'Malley, Lloyd Johnston. (2006) "Effect of Televised, Tobacco Company-Funded Smoking Prevention Advertising on Youth Smoking-Related Beliefs, Intentions, and Behavior." *American Journal of Public Health*. Vol. 96, No. 12, pp. 2154-2160.
466. Lisa Henriksen, Amanda Dauphinee, Yun Wang, Stephen Fortmann. (2006) "Industry Sponsored Anti-smoking Ads and Adolescent Reactance: Test of a Boomerang Effect." *Tobacco Control*. Vol. 15, No. 1, pp. 13-18.
- Matthew Farrelly, Cheryl Heaton, Kevin Davis, Peter Messeri, James Hersey, M. Lyndon Haviland. (2002) "Getting to the Truth: Evaluating National Tobacco Countermarketing Campaigns." *American Journal of Public Health*. Vol. 92, No. 6, pp. 901-907.
467. "...the campaign slogans 'Think. Don't Smoke.' (Philip Morris) and 'Tobacco Is Whacko, if You Are a Teen' (Lorillard) are distinctly counter to recommendations made by the Columbia Expert Panel on youth tobacco countermarketing. This panel advises against directive messages such as those telling youths not to smoke and that smoking is uncool and for adults only."
- Matthew Farrelly, Cheryl Heaton, Kevin Davis, Peter Messeri, James Hersey, M. Lyndon Haviland. (2002) "Getting to the Truth: Evaluating National Tobacco Countermarketing Campaigns." *American Journal of Public Health*. Vol. 92, No. 6, pp. 901-907.
468. Claude Miller, Michael Burgoon, Joseph Grandpre, Eusebio Alvaro. (2009) "Identifying Principal Risk Factors for the Initiation of Adolescent Smoking Behaviors: The Significance of Psychological Reactance." *Health Communication*. Vol. 19, No. 3, pp. 241-252.
469. Sherry Emery, Melanie Wakefield, Yvonne Terry-McElrath, Henry Saffer, Glen Szczypka, Patrick O'Malley, Lloyd Johnston, Frank Chaloupka, Brian Flay. (2005) "Televised State-Sponsored Antitobacco Advertising and Youth Smoking Beliefs and Behavior in the United States, 1999-2000." *Archives of Pediatric and Adolescent Medicine*. Vol. 159, No. 7, pp. 639-645.
- Matthew Farrelly, Kevin Davis, M. Lyndon Haviland, Peter Messeri, Cheryl Heaton. (2005) "Evidence of a Dose-Response Relationship Between 'truth' Antismoking Ads and Youth Smoking Prevalence." *American Journal of Public Health*, Vol. 95, No. 3, pp. 425-431.
- Melanie Wakefield, Brian Flay, Mark Nichter, Gary Giovino. (2003) "Effects of Anti-Smoking Advertising on Youth Smoking: A Review." *Journal of Health Communication*. Vol. 8, No. 3, pp. 229-247.

Matthew Farrelly, Jeffrey Niederdeppe, Jared Yarsevich. (2003) "Youth Tobacco Prevention Mass Media Campaigns: Past, Present, and Future Directions." *Tobacco Control*. Vol. 12, Suppl. 1, pp. i35-i47.

470. Claude Miller, Lindsay Lane, Leslie Deatrick, Alice Young, Kimberly Potts. (2007) "Psychological Reactance and Promotional Health Messages: The Effects of Controlling Language, Lexical Concreteness, and the Restoration of Freedom." *Human Communication Research*. Vol. 33, No. 2, pp. 219-240.
- Robert Hornik. (Ed.) (2002) "Public Health Communication: Evidence for Behavior Change." Lawrence Erlbaum Associates. Mahwah, NJ.
471. Most virgin teens said their reason for not having sex yet was that doing so would be against their religion or morals. This was also the most popular answer in the previous study in 2002.
- Joyce Abma, Gladys Martinez, Casey Copen. (2010) "Teenagers in the United States: Sexual Activity, Contraceptive Use, and Childbearing, National Survey of Family Growth 2006-2008." *Vital and Health Statistics*. Vol. 23, No. 30, pp.1-47.
472. W. Bradford Wilcox, Elizabeth Marquardt, David Popenoe, Barbara Dafoe Whitehead. (2010) "The State of Our Unions 2010 – When Marriage Disappears: The New Middle America." National Marriage Project, University of Virginia.
473. Religious norms are less persuasive in America than they are in less diverse areas.
- Ruth Engs, David Hanson, Louis Gliksman, Cynthia Smythe. (1990) "Influence of Religion and Culture on Drinking Behaviours: A Test of Hypotheses between Canada and the USA." *British Journal of Addiction*. Vol. 85, No. 11, pp. 1475-1482.
474. Debra Ringold. (2002) "Boomerang Effects in Response to Public Health Interventions: Some Unintended Consequences in the Alcoholic Beverage Market." *Journal of Consumer Policy*. Vol. 25, No. 1, pp. 27-63.
- Lillian Bensly, Rui Wu. (1991) "The Role of Psychological Reactance in Drinking Following Alcohol Prevention Messages." *Journal of Applied Social Psychology*. Vol. 21, No. 13, pp. 1111-1124.
- This helps explain why the first time an abstinence-based approach was proven to work, it was with a method that presented the strategy with no moral or ethical context.
- John Jemmott III, Loretta Jemmott, Geoffrey Fong. (2010) "Efficacy of a Theory-Based Abstinence-Only Intervention over 24 Months." *Archives of Pediatrics & Adolescent Medicine*. Vol. 164, No. 2, pp. 152-159.
475. When people have already displayed reluctance to a message, simply repeating it can cause them to become even less receptive.

John Cacioppo, Richard Petty. (1989) “Effects of Message Repetition on Argument Processing, Recall, and Persuasion.” *Basic and Applied Social Psychology*. Vol. 10, No. 1, pp. 3-12.

Repeating a message more than is needed to get a point across causes people to stop paying close attention.

C. Samuel Craig, Brian Sternthal, Clark Leavitt. (1976) “Advertising Wearout: An Experimental Analysis.” *Journal of Marketing Research*. Vol. 13, No. 4, pp. 365-372.

Their minds wander and they focus more on coming up with arguments than with the intended message....

John Cacioppo, Richard Petty. (1979). “Effects of Message Repetition and Position on Cognitive Response, Recall and Persuasion.” *Journal of Personality and Social Psychology*. Vol. 37, No. 1, pp. 97-109.

...even when it is restated in a variety of creative ways.

Bobby Calder, Brian Sternthal. (1980) “Television Commercial Wearout: An Information Processing View.” *Journal of Marketing Research*, Vol. 17, No. 2, pp. 173-186.

Allan Greenberg, Charles Suttoni. (1973) “Television Commercial Wearout.” *Journal of Advertising Research*. Vol. 13, No. 5, pp. 47-54.

476. Deborah Roffman. (2004) “They’ll Abstain If They’re Given Good Reasons.” *The Washington Post*. Dec. 12, 2004. p. B02. [Link](#)

477. Ruth Beyth-Marom, Baruch Fischhoff. (1999) “Adolescents’ Decisions about Risks: A Cognitive Perspective.” (John Schulenberg, Jennifer Maggs, Klaus Hurrelmann, Eds.) In “Health Risks and Developmental Transitions during Adolescence.” Cambridge University Press. Cambridge, England.

478. Interestingly, despite extremists from both camps insisting their message should stand alone, even more parents than teens wanted teens to get more information on both contraception and abstinence.

Bill Albert. (2010) “With One Voice 2010: America’s Adults and Teens Sound Off about Teen Pregnancy.” *The National Campaign to Prevent Teen and Unplanned Pregnancy*. Washington, DC.

479. Bill Albert. (2010) “With One Voice 2010: America’s Adults and Teens Sound Off about Teen Pregnancy.” *The National Campaign to Prevent Teen and Unplanned Pregnancy*. Washington, DC.

480. Problem behaviors in adolescents serve “as a transition marker, a way of placing a claim on a more mature status.”

Richard Jessor. (1987) “Problem-Behavior Theory, Psychosocial Development, and Adolescent Problem Drinking.” *British Journal of Addiction*. Vol. 82, No. 4, pp. 331-342.

This is based on an earlier theory that several “problem behaviors,” including alcohol abuse, smoking, and sex among adolescents, are related.

Richard Jessor, Shirley Jessor. (1977) "Problem Behavior and Psychosocial Development: A Longitudinal Study of Youth." Academic Press. New York, NY.

The theory was supported in:

John Donovan, Richard Jessor, Frances Costa. (1988) "Syndrome of Problem Behavior in Adolescence: A Replication." *Journal of Consulting and Clinical Psychology*. Vol. 56, No. 5, pp. 762-765.

The explanation was expanded and clarified in:

Richard Jessor. (1992) "Risk Behavior in Adolescence: A Psychosocial Framework for Understanding and Action." *Developmental Review*. Vol. 12, No. 4, pp. 374-390.

481. This study illustrates how "self vs. other" perception extends to people close to us, particularly with threats to our health.

Linda Perloff, Barbara Fetzler. (1986) "Self-Other Judgments and Perceived Vulnerability to Victimization." *Journal of Personality and Social Psychology*. Vol. 50, No. 3, pp. 502-510.

482. Sinikka Elliott. (2010) "Parents' Constructions of Teen Sexuality: Sex Panics, Contradictory Discourses, and Social Inequality." *Symbolic Interaction*. Vol. 33, No. 2, pp. 191-212.

483. 73% of parents of non-virgin 13- and 14- year olds thought their child was still a virgin. 51% of mothers of non-virgin students in grades 8-11 thought their child was still a virgin.

Hannah Brückner, Peter Bearman. (2003) "Dating Behavior and Sexual Activity of Young Adolescents: Analyses of the National Longitudinal Study of Adolescent Health" (Bill Albert, Sarah Brown, Christine Flanigan, Eds.) In "14 and Younger: The Sexual Behavior of Young Adolescents." National Campaign to Prevent Teen Pregnancy. Washington, DC. pp. 31-56.

484. Bill Albert. (2007) "With One Voice 2007: America's Adults and Teens Sound Off about Teen Pregnancy." The National Campaign to Prevent Teen and Unplanned Pregnancy. Washington, DC.
485. Bill Albert. (2010) "With One Voice 2010: America's Adults and Teens Sound Off about Teen Pregnancy." The National Campaign to Prevent Teen and Unplanned Pregnancy. Washington, DC.
486. Megan Beckett, Marc Elliott, Steven Martino, David Kanouse, Rosalie Corona, David Klein, Mark Schuster. (2010) "Timing of Parent and Child Communication about Sexuality Relative to Children's Sexual Behaviors." *Pediatrics*. Vol. 125, No. 1, pp. 34-42.

487. Adults and teens were asked: "When it comes to your/teens' decisions about sex, who is most influential?"

"Parents" was the most popular answer among teens by far, about as popular as every other source combined, and over twice as popular as "friends."

A smaller share of adults thought that parents were as influential, and while “parents” was still the most popular answer among adults, “friends” was a close second.

Bill Albert. (2010) “With One Voice 2010: America’s Adults and Teens Sound Off about Teen Pregnancy.” The National Campaign to Prevent Teen and Unplanned Pregnancy. Washington, DC.

488. Bill Albert. (2010) “With One Voice 2010: America’s Adults and Teens Sound Off about Teen Pregnancy.” The National Campaign to Prevent Teen and Unplanned Pregnancy. Washington, DC.

Douglas Kirby. (2007) “Emerging Answers 2007: Research Findings on Programs to Reduce Teen Pregnancy and Sexually Transmitted Diseases.” The National Campaign to Prevent Teen and Unplanned Pregnancy. Washington, DC.

489. Arland Thornton, Linda Young-DeMarco. (2001) “Four Decades of Trends in Attitudes toward Family Issues in the United States: The 1960s through the 1990s.” *Journal of Marriage and the Family*. Vol. 63, No. 4, pp. 1009-1037.

490. 10% said they were sure they would marry and not live with a romantic partner before marriage. All other respondents signified varying levels of uncertainty over these future decisions. Also of note, very few expected to cohabit but not marry; the majority still expect to marry.

Wendy Manning, Monica Longmore, Peggy Giordano. (2007) “The Changing Institution of Marriage: Adolescents’ Expectations to Cohabit and to Marry.” *Journal of Marriage and Family*. Vol. 69, No. 3, pp. 559-575.

491. Most research about moral disengagement is focused on violence, but the principles apply to any behavior that people can selectively view as moral or immoral.

Albert Bandura, Claudio Barbaranelli, Gian Vittorio Caprara, Concetta Pastorelli. (1996) “Mechanisms of Moral Disengagement in the Exercise of Moral Agency.” *Journal of Personality and Social Psychology*. Vol. 71, No. 2, pp. 364-374.

Albert Bandura. (2002) “Selective Moral Disengagement in the Exercise of Moral Agency.” *Journal of Moral Education*. Vol. 31, No. 2, pp. 101-119.

492. James Price Dillard, Kirsten Weber, Renata Vail. (2007) “The Relationship between the Perceived and Actual Effectiveness of Persuasive Messages: A Meta-Analysis with Implications for Formative Campaign Research.” *Journal of Communication*. Vol. 57, No. 4, pp. 613-631.

493. Joyce Wolburg. (2006) “College Students’ Responses to Antismoking Messages: Denial, Defiance, and Other Boomerang Effects.” *Journal of Consumer Affairs*. Vol. 40, No. 2, pp. 294-323.

494. Douglas Kirby. (2007) “Emerging Answers 2007: Research Findings on Programs to Reduce Teen Pregnancy and Sexually Transmitted Diseases.” The National Campaign to Prevent Teen and Unplanned Pregnancy. Washington, DC.

495. Jessica Fields. (2008) “Risky Lessons: Sex Education and Social Inequality.” Rutgers University Press. London, England.
496. Emily Moyer-Gusé, Robin Nabi. (2010) “Explaining the Effects of Narrative in an Entertainment Television Program: Overcoming Resistance to Persuasion.” *Human Communication Research*. Vol. 36, No. 1, pp. 26-52.
497. Quote from:  
Robert Preidt. (2008) “Rap Music Glorifying Drug Use.” ABC News, Apr. 2, 2008. [Link](#)  
See also:  
Denise Herd. (2008) “Changes in Drug Use Prevalence in Rap Music Songs, 1979–1997.” *Addiction Research and Theory*. Vol. 16, No. 2, pp. 167-180.
498. Cyndi Lauper. (2010) “The 2010 Time 100: Lady Gaga.” *Time*. Apr. 29, 2010. [Link](#)  
Nate Silver. (2010) “The Influence Index.” *Time*. Apr. 29, 2010. [Link](#)
499. Pomerantz, Dorothy. “Lady Gaga Tops Celebrity 100 List.” *Forbes*. May 18, 2011. [Link](#)
500. Benji Wilson. (2010) “Lady Gaga Gets Lippy: The Pop Star Teams with Mac to Raise AIDS Awareness.” *Daily Mail*. Apr. 10, 2010. [Link](#)
501. Ariel Schwartz. (2011) “The Lady Gaga Effect: Pop Star’s Social Media Savvy Helps the MAC AIDS Fund Raise Millions of Bucks.” *Fast Company*. Feb. 18, 2011. [Link](#)
502. David Fricke. (2009) “U2 Join Lady Gaga, Scarlett Johansson and More for Gavin Friday Benefit at Carnegie Hall.” *Rolling Stone*. Oct. 5, 2009. [Link](#)  
Jennifer Vineyard. (2010) “Lady Gaga Salutes Elton John with Special Set at All-Star amfAR Gala.” *Rolling Stone*. Feb. 11, 2010. [Link](#)
503. Gil Kaufman. (2011) “Lady Gaga Dresses Like a Condom to Promote AIDS Awareness.” *MTV*. Feb. 17, 2011. [Link](#)
504. Gil Kaufman. (2011) “Lady Gaga Questions President Obama on Bullying.” *MTV News*. Sep. 27, 2011. [Link](#)
505. “I’ve got a lot of young fans and the truth is I don’t want anyone doing drugs, A, and B, honestly you should wait as long as you can to have sex because as a woman you don’t even begin to enjoy it until your mid 20s.”  
Sarah Fitzmaurice. (2011) “‘Don’t Have Sex for As Long As Possible’: Lady Gaga Pleads with Her Female Fans while Dressed in an S&M-Inspired PVC Outfit.” *Daily Mail*. Jul. 21, 2011. [Link](#)
506. Staff Writer. (2010) “Lady Gaga Tells Women to Stay Celibate.” *The Telegraph*. Mar. 2, 2010. [Link](#)
507. Benji Wilson. (2010) “Lady Gaga Gets Lippy: The Pop Star Teams with Mac to Raise AIDS Awareness.” *Daily Mail*. Apr. 10, 2010. [Link](#)

508. People are less likely to exhibit reactance when a message comes from someone who is similar or who shares their values.
- Paul Silvia. (2005) "Deflecting Reactance: The Role of Similarity in Increasing Compliance and Reducing Resistance." *Basic and Applied Social Psychology*. Vol. 27, No. 3, pp. 277-284.
509. Stacy Tessler Lindau, L. Philip Schumm, Edward Laumann, Wendy Levinson, Colm O'Muircheartaigh, Linda Waite. (2007) "A Study of Sexuality and Health among Older Adults in the United States." *The New England Journal of Medicine*. Vol. 357, No. 8 , pp. 762-774.
510. Stephanie Sanders, Michael Reece, Debby Herbenick, Vanessa Schick, Brian Dodge, J. Dennis Fortenberry. (2010) "Condom Use During Most Recent Vaginal Intercourse Event among a Probability Sample of Adults in the United States." *The Journal of Sexual Medicine*. Vol. 7, No. S5, pp. 362-373.
- Vanessa Schick, Debby Herbenick, Michael Reece, Stephanie Sanders, Brian Dodge, Susan Middlestadt, J. Dennis Fortenberry. (2010) "Sexual Behaviors, Condom Use, and Sexual Health of Americans Over 50: Implications for Sexual Health Promotion for Older Adults." *The Journal of Sexual Medicine*. Vol. 7, No. S5, pp. 315-329.
511. Sarit Golub, Julia Tomassilli, David Pantalone, Mark Brennan, Stephen Karpiak, Jeffrey Parsons. (2010) "Prevalence and Correlates of Sexual Behavior and Risk Management among HIV-Positive Adults Over 50." *Sexually Transmitted Diseases*. Vol. 37, No. 10, pp. 615-620.
512. Stacy Tessler Lindau, L. Philip Schumm, Edward Laumann, Wendy Levinson, Colm O'Muircheartaigh, Linda Waite. (2007) "A Study of Sexuality and Health among Older Adults in the United States." *The New England Journal of Medicine*. Vol. 357, No. 8 , pp. 762-774.
513. Susan Henderson, Lisa Bernstein, Diane Marie St. George, Joyce Doyle, Anuradha Paranjape, Giselle Corbie-Smith. (2004) "Older Women and HIV: How Much Do They Know and Where Are They Getting Their Information?" *Journal of the American Geriatrics Society*. Vol. 52, No. 9, pp. 1549-1553.
- Karin Ann Mack, Shayne Delmar Bland. (1999) "HIV Testing Behaviors and Attitudes Regarding HIV/AIDS of Adults Aged 50-64." *The Gerontologist*. Vol. 39, No. 6, pp. 687-694.
514. Centers for Disease Control and Prevention. (2007) "Cases of HIV infection and AIDS in the United States and Dependent Areas, 2005." *HIV/AIDS Surveillance Report*. Vol. 17, Revised Edition. Centers for Disease Control and Prevention. Atlanta, GA.
515. Stacy Tessler Lindau, Sara Leitsch, Kristina Lundberg, Jessica Jerome. (2006) "Older Women's Attitudes, Behavior, and Communication about Sex and HIV: A Community-Based Study." *Journal of Women's Health*. Vol. 15, No. 6, pp. 747-753.
516. Placing responsibility on the individual is critical to undertaking difficult tasks.



Bernard Weiner. (1985) "An Attributional Theory of Achievement Motivation and Emotion." *Psychological Review*. Vol. 92, No. 4, pp. 548-573.

Note: This has been observed as a European/American trait. Working toward a common goal is the aspect of the movement that would appeal more to Asian cultures.

Jonathan Gore, Susan Cross, Chie Kanagawa. (2009) "Acting in Our Interests: Relational Self-Construal and Goal Motivation across Cultures." *Motivation and Emotion*. Vol. 33, No. 1, pp. 75-87.

Shigehiro Oishi, Ed Diener. (2009) "Goals, Culture, and Subjective Well-Being." *Social Indicators Research Series*, Vol. 38, No. 1, pp. 93-108.

517. We can and will make automatic decisions that further our goals, but only if we have truly accepted them.

John Bargh, Melissa Ferguson. (2000) "Beyond Behaviorism: On the Automaticity of Higher Mental Processes." *Psychological Bulletin*. Vol. 126, No. 6, pp. 925-945.

518. This article discusses the complex factors that affect forgoing immediate urges to work toward a long-term goal.

Antoine Bechara. (2005) "Decision Making, Impulse Control and Loss of Willpower to Resist Drugs: A Neurocognitive Perspective." *Nature Neuroscience*. Vol. 8, No. 11, pp. 1458-1463.

519. Kathryn Greene, Smita Banerjee. (2006) "Disease-Related Stigma: Comparing Predictors of AIDS and Cancer Stigma." *Journal of Homosexuality*. Vol. 50, No. 4, pp. 185-209.

520. "In 2009, blacks/African Americans accounted for 52% of all diagnoses of HIV infection."

Centers for Disease Control and Prevention. (2011) "Diagnoses of HIV Infection and AIDS in the United States and Dependent Areas, 2009." *HIV Surveillance Report*. Vol. 21. Centers for Disease Control and Prevention. Atlanta, GA.

In 2008, black/African Americans were estimated to be eight times as likely as white Americans to acquire HIV in their lifetimes.

W.K. Adih, X. Hu, M.L. Campsmith, L. Espinoza, H.I. Hall. (2010) "Estimated Lifetime Risk for Diagnosis of HIV Infection among Hispanics/Latinos --- 37 States and Puerto Rico, 2007." *Morbidity and Mortality Weekly Report (MMWR)*. Vol. 59, No. 40, pp. 1297-1301. Centers for Disease Control and Prevention. Atlanta, GA.

521. James Bettman. (1979) "Memory Factors in Consumer Choice: A Review." *The Journal of Marketing*. Vol. 43, No. 2, pp. 37-53.

This particular article was chosen because these campaigns share several aspects with other consumer marketing efforts. For more information on how memories form and how we work with them, *Science* has some great articles:

James McGaugh. (2000) “Memory – A Century of Consolidation.” *Science*. Vol. 287, No. 5451, pp. 248-251.

Alan Baddeley. (1992) “Working Memory.” *Science*. Vol. 255, No. 5044, pp. 556-559.

522. There has been almost no change in the annual number of new HIV cases since 1991.

H. Irene Hall, Ruiguang Song, Philip Rhodes, Joseph Prejean, Qian An, Lisa Lee, John Karon, Ron Brookmeyer, Edward Kaplan, Matthew McKenna, Robert Janssen. (2008) “Estimation of HIV Incidence in the United States.” *Journal of the American Medical Association*. Vol. 300, No. 5, pp. 520-529.

523. Duncan MacKellar, Linda Valleroy, Gina Secura, Stephanie Behel, Trista Bingham, David Celentano, Beryl Koblin, Marlene LaLota, Douglas Shehan, Hanne Thiede, Lucia Torian. (2007) “Perceptions of Lifetime Risk and Actual Risk for Acquiring HIV among Young Men Who Have Sex with Men.” *AIDS and Behavior*. Vol. 11, No. 2, pp. 263-270.

524. Centers for Disease Control and Prevention. (2009) “HIV Prevention in the United States: At a Critical Crossroads.” Centers for Disease Control and Prevention. Atlanta, GA.

525. Ole Benedictow. (2004) “The Black Death, 1346-1353: The Complete History.” Boydell Press. Woodbridge, UK.

526. J. Mitchell Harris II, Jack Gwaltney, Jr. (1996) “Incubation Periods of Experimental Rhinovirus Infection and Illness.” *Clinical Infectious Diseases*. Vol. 23, No. 6, pp. 1287-1290.

527. George Rutherford, Alan Lifson, Nancy Hessel, William Darrow, Paul O’Malley, Susan Buchbinder, J. Lowell Barnhart, Torsten Bodecker, Lyn Cannon, Lynda Doll, Scott Holmberg, Janet Harrison, Martha Rogers, David Werdegar, Harold Jaffe. (1990) “Course of HIV-I Infection in a Cohort of Homosexual and Bisexual Men: An 11 Year Follow Up Study.” *British Medical Journal*. Vol. 301, No. 6762, pp. 1183-1188.

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INTRIGUE! ADVENTURE! CORPORATIONS SAVE THE DAY!

# TALES FROM 2040

#003  
AUGUST  
2012



**HOW FACEBOOK BEAT THE  
BANKS AND RAISED AN  
ARMY OF NEW VOLUNTEERS**

A SHORT STORY FROM A BRIGHTER FUTURE  
BY CHRISTOPHER CARDINAL



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# HOW FACEBOOK BEAT THE BANKS AND RAISED AN ARMY OF NEW VOLUNTEERS

Last year, in honor of Mark Zuckerberg's 55th birthday, columnist Carey Sarto wrote an editorial about how much had changed in the 35 years since Facebook was founded. An excerpt:

*My 7-year-old grandson recently asked why the icon for the Facebook badge he won in a soccer tournament was a small gold cup, rather than a soccer ball.<sup>1</sup> Realizing that he had never seen an actual, physical trophy, I dug one of mine out of the garage. He examined it closely, a puzzled expression on his face.*

*"What do you drink out of it?" he asked.*

*I explained that when I was his age, we didn't have digital awards, and this was what we got instead. Unimpressed, he handed it back and said, "If it's a cup you can't drink out of, then what good is it?"*

*Stammering for a lame answer made me feel like as much a relic of another era as the lump of wood and metal in my hands, but it drove home the point that times have changed.*

*Yesterday I started my car with Facebook, drove to the store where I bought my groceries with Facebook, including a new salad dressing that Facebook offered me a coupon to try because their algorithms thought I would like it. (I did.)*

*Today, Mark Zuckerberg qualifies for senior citizen discounts (not that he needs them). Remember when Zuck was an adorable young geek who wore hoodies and Facebook was just a website where you caught up with friends?*

With Facebook playing such a central role in so many facets of our daily lives, unless you were there, it's hard to believe there was a time when people thought Facebook was just a fad.<sup>2</sup> In fact, in the decade before Facebook, a host of similar applications had already come to and, for the most part, gone from the American market.

Starting in the late 1990s, a long string of companies each held the top spot as the largest online social network for a couple of years, then faded into obscurity as users flocked to another. First it was SixDegrees.com, then it was LiveJournal, which lost to Friendster, which was surpassed by MySpace.<sup>3</sup> In 2008, Facebook took the lead, making it the new company to beat.<sup>4</sup> Every company before it had been “the next big thing” at one point, but each had been replaced. What would make Facebook any different? Given the history of fickle users, despite the company's rapid success, its eventual downfall seemed inevitable.<sup>5</sup>

Nevertheless, 2010 was a banner year for Mark Zuckerberg. Facebook had its first fully profitable year,<sup>6</sup> hit a half billion users,<sup>7</sup> and unseated Google as the most popular site in the world.<sup>8</sup> To top it off, *Time* named Zuckerberg the Person of the Year,<sup>9</sup> *Vanity Fair* called him the most influential person of the Information Age,<sup>10</sup> and a

Hollywood blockbuster about his rise to power won several Academy Awards.<sup>11</sup>

The next year, though, Facebook started losing users by the millions in the US.<sup>12</sup> Everyone in the tech industry wondered who would dethrone Facebook. Would it be Twitter? It received more press despite having only a fraction of the usage,<sup>13</sup> largely because it was widely used by celebrities. Or perhaps the four NYU students who raised \$200,000 through Kickstarter to create *Diaspora*, an open-source social web?<sup>14</sup> Or the *App.net* team, who similarly raised over \$500,000 to develop a social networking application that was advertising-free?<sup>15</sup> Maybe LinkedIn? Often called “Facebook for grownups,” the site catered to professionals and had solid revenue as well as over 150 million users.<sup>16</sup> And what about Google, the 800-pound gorilla of the web? It had recently launched *Google+*, an application designed from the ground up to take down Facebook, and it had also reportedly made a huge investment in Zynga, the maker of the games that helped make Facebook so popular.<sup>17</sup>

Furthermore, other large countries were dominated by services that were not popular in North America or Europe. Friendster, for example, grew to become the favorite social networking site of the Philippines and much of Southeast Asia. Google’s *Orkut*, which never caught on in America, was wildly popular in Brazil and India. Vkontakte owned Russia, Mixi had Japan, and Qzone controlled China.<sup>18</sup> If the social networking war were laid out on a map, much of the world would have been occupied by enemy armies.

And it was a war. Tech companies were fighting over ownership of information that was not really any of theirs in the first place: our personal data. In July 2011, after

Google and Twitter could not hammer out an agreement, all our tweets suddenly disappeared from Google's real-time search.<sup>19</sup> Three days later, Facebook blocked a Google *Chrome* extension that let users export their Facebook friends to other applications like *Google+*.<sup>20</sup>

Building walls around information like this seemed out of character for Zuckerberg, a person who summed himself up on his own Facebook page by writing, "I'm trying to make the world a more open place."<sup>21</sup> Someone who, just three months earlier, decided to share the specifications for Facebook's highly efficient data centers so others could benefit from their research and development, and he did this at a time when most companies treated these details as trade secrets.<sup>22</sup> Then again, the company would soon have shareholders to be accountable to, so it would inevitably have to start playing hardball at some point.

## FACEBOOK OPENS UP

In February 2012, Facebook announced that it was going public with the largest tech IPO in history.<sup>23</sup> At the time, its service was already immensely popular. Americans spent more time on Facebook than any other site,<sup>24</sup> and the company had nearly a billion users globally, over half of whom logged on each day. About one out of eight people in the world used the site each month,<sup>25</sup> and they were all connected to each other by fewer than five people, on average.<sup>26</sup> Facebook's rise in popularity was also matched with financial success, as profits and revenue had both more than quadrupled in the previous two years.<sup>27</sup>

Not all the news was so rosy, however. To become a publicly traded company, Facebook had to identify potential risk factors in a series of documents filed with the

SEC, some of which were unsettling. For example, Facebook revealed that around 40 or 50 million of its users were fake.<sup>28</sup> These documents also showed how much Facebook relied on Zynga, the maker of the most popular games on Facebook, such as *FarmVille*.<sup>29</sup> In fact, one out of every five dollars Facebook made the previous year had come from Zynga.<sup>30</sup> Facebook said that it could lose money if Zynga tried to take its players elsewhere,<sup>31</sup> which is exactly what happened just a month later when Zynga announced it was developing a platform to deliver its games independently.<sup>32</sup>

Facebook also warned investors that it made no meaningful revenue from mobile users and that it could spell trouble if their number increased.<sup>33</sup> Unfortunately, people were already spending more time on Facebook on their smartphones than on their computers, and this ratio was rising rapidly.<sup>34</sup> There were some other unpleasant surprises along the way, too, like General Motors saying Facebook ads were ineffective and pulling its \$10 million advertising budget just days before the IPO.<sup>35</sup> But none of these revelations was as shocking as how the CEO spent the company's money.

## INSTAGRAM

On April 9, 2012, less than six weeks before Facebook would go public, Zuckerberg announced that the company would buy the social photo-sharing startup Instagram.<sup>36</sup> Just a few days earlier, a journalist had explained:<sup>37</sup>

*For the uninitiated, Instagram is a simple app that lets you take photographs and apply filters that make the pictures look like old-fashioned-y Kodak or Polaroid snapshots. Neat-o, right?*

Instagram had been called “the Auto-Tune of photography” for its ability to hide the imperfections found in most photos taken with mobile devices.<sup>38</sup> Facebook needed a stronger mobile photo interface, so the acquisition made sense.<sup>39</sup> What raised eyebrows and dropped jaws was the price tag: \$1 billion.<sup>40</sup>

To put this in perspective, Zuckerberg decided to spend all of the previous year’s profits in one shot,<sup>41</sup> reportedly without even consulting the board of directors,<sup>42</sup> on an 18-month-old company that had about a dozen employees, zero revenue, and no real plans to make revenue.<sup>43</sup> Zuckerberg’s casual leadership style had been questioned ever since he turned down the first ten-figure offer to buy the company.<sup>44</sup> But when two guys in their twenties made the Instagram deal mostly on their own over a weekend, it led experienced investors to think Zuckerberg had no concept of the value of a dollar – or a billion of them. Others were left wondering if the company was led by a misunderstood genius or a kid who was in over his head.

They needn’t have worried. It was true that Facebook did not need Instagram’s software, since it was fairly simple and Facebook had already developed a similar app almost a year earlier.<sup>45</sup> Facebook did not need Instagram’s users, either. Considering how many of them were already on Facebook, the acquisition would probably not bring in a significant number of new people. However, while Instagram was not worth much to Facebook, if a competitor had bought it instead, the results could have been devastating. For example, Google had already spent a fortune developing its own social network and could have easily afforded another billion or more to give people a reason to check out *Google+*.

Zuckerberg knew how important photo sharing was to Facebook<sup>46</sup> – people were uploading more than 300 million photos there each day.<sup>47</sup> Instagram did not have any revenue, but it was cool and growing rapidly, and it could have touched off the kind of mass migration that had ended every social network that came before Facebook. Even if it did not add to the company's bottom line, paying twice the value investors had placed on Instagram just four days earlier<sup>48</sup> was nevertheless a shrewd move, if only to keep it from becoming a reason to share photos somewhere else.

## **THE CLAMOR AND THE CLANGING OF THE BELLS**

Zuckerberg had long been reluctant to take Facebook public.<sup>49</sup> In the months leading up to Facebook's IPO, he seemed distracted and had been skipping meetings with analysts and bankers.<sup>50</sup> Nevertheless, on May 18, 2012, he rang the Nasdaq opening bell wearing his trademark hoodie.

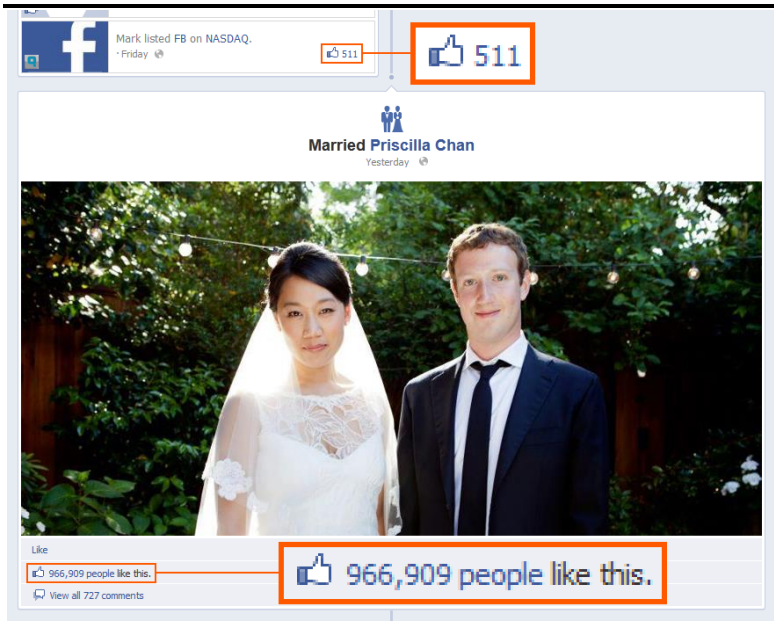
After a bungled start that prevented trading for half an hour, the freshly minted Facebook stock set a world record as 82 million shares were traded in the first 30 seconds alone.<sup>51</sup> After an intense day, it closed at almost exactly the same price at which it opened, which made some analysts say the stock had been fairly priced, but disappointed legions of investors hoping to make a quick profit.<sup>52</sup> Despite suddenly being worth about \$20 billion, Zuckerberg had more important matters on his mind.

The next day, fewer than a hundred people attended what they thought was going to be a graduation party for Zuckerberg's longtime girlfriend, Priscilla Chan, at their home in Palo Alto, California. Instead, guests were



surprised to find out that they had actually been invited to the young couple’s wedding.<sup>53</sup> True to form, Zuckerberg immediately changed his relationship status to “married” and posted a photo of his bride and himself to his Facebook Timeline. By the following day, nearly a million people had liked that status update. (By comparison, the previous update in which he had announced Facebook going public had received just over 500 “likes” by the same time.)<sup>54</sup>

Illustration: Mark Zuckerberg’s Timeline on April 20, 2012<sup>55</sup>



## A SHORT HONEYMOON

Soon Zuckerberg and Chan were enjoying a low-key visit to Italy,<sup>56</sup> but as far as Wall Street was concerned, Facebook’s honeymoon period was already over.

In the turbulent market of the early 2000s, fortunes often reversed quickly. Even well after the dot-com bubble, dozens of social media companies shot up into the stratosphere, then came crashing down to Earth just as swiftly.

In 2005, Google offered to buy Friendster for stock that would have been worth \$1 billion. Instead, it sold for a tenth of that value four years later.<sup>57</sup> Similarly, Digg was reportedly offered \$200 million from Google in 2008, but ended up selling the site for a quarter of a percent of that, again just four years later.<sup>58</sup> The moral of these stories (other than to think twice before turning down a check from Google) was that social media companies tended to have very short shelf lives.

In December 2011, Zynga went public to much fanfare, with some analysts even comparing it to Apple,<sup>59</sup> resulting in a \$9 billion valuation.<sup>60</sup> Eleven weeks later, Zynga stock was up almost 60 percent from the opening price, but by July 25, 2012, it had already fallen two-thirds from its peak. That day, it released a dismal quarterly report that revealed major losses and reduced its earnings outlook to a quarter of previous projections. The bad news lost it another 40 percent in after-hours trading and dragged Facebook's stock down almost 7 percent along with it.<sup>61</sup>

The next day, Facebook released its own quarterly report, the first since going public. The company met its own forecasts and beat analysts' predictions, but its stock still suffered its largest single-day loss to date.<sup>62</sup>

To reiterate, one social media company fell so short of its projections that it triggered a swarm of law firms to probe the company for federal securities violations, particularly

since Zynga executives had unloaded a half billion dollars' worth of stock just a few months earlier without notifying investors that its business might be in trouble.<sup>63</sup>

The other social media company did exactly as well as it said it would, which was better than analysts had predicted. Yet that wasn't good enough for Wall Street, which based on those same predictions had valued the company \$34 billion higher just ten weeks earlier. The same faulty market mechanics that hyped tech stocks into overinflated values also disproportionately beat them down when these unrealistic expectations were not met.

A litany of bad news came out around that time, with each batch pulling the stock down further. In America, where the company made most of its money,<sup>64</sup> Facebook usage and customer satisfaction were declining.<sup>65</sup> Updated calculations stated that the number of fake accounts was nearly double the company's estimates from a few months earlier, revealing that almost one out of ten "people" on Facebook were not who they said they were.<sup>66</sup> Some advertisers claimed that as many as 80 percent of clicks on Facebook ads were fake, too, made by bots instead of people.<sup>67</sup>

## **ZUCK VS. GOGLIATH**

Just two weeks after going public, Facebook had already lost almost 30 percent of its original value. Two months later, it had lost nearly half.<sup>68</sup> Yet even after this sharp plunge, Facebook stock was still over twice the price of Google's when compared to earnings.<sup>69</sup>

One could argue that Google's main service lent itself more naturally to advertising, since users went there looking to find something specific, whereas people visited Facebook

largely to pass time and be entertained.<sup>70</sup> However, these are the very same reasons people watched television, and that industry had no problems making money, even during a recession.<sup>71</sup> The fact was that both companies made the vast majority of their revenue from advertising, and Google did a better job of using what it knew about people to deliver ads more effectively. Even though people spent far more time on Facebook each day,<sup>72</sup> Google made six times as much revenue per user.<sup>73</sup>

Google stock was also expensive at its IPO, a price it only justified with years of meteoric growth. Facebook's even higher price was harder to swallow considering its own growth was slowing and revenues were actually slipping.<sup>74</sup> Its stock was falling fast, and to stop the bleeding, Facebook needed to multiply its profits by several times.

It could not accomplish this simply by getting even more people to use Facebook. Users from wealthier countries, North America in particular, brought in much more revenue than those in other areas.<sup>75</sup> Yet most adults in the United States were already using Facebook, including the vast majority of the 18-49 demographic coveted by advertisers.<sup>76</sup> No, if Facebook were to regain its former glory, it needed to figure out how to keep its existing users satisfied and improve its advertising model.<sup>77</sup>

A saying widely misattributed to Albert Einstein states that insanity is doing the same thing over and over again and expecting different results.<sup>78</sup> For years Facebook had stayed mostly the same, making only minor tweaks to its service. Fortunately, Zuckerberg had known for a while that small, incremental changes were not going to lead to the kind of explosive growth the company needed, and he still had a few aces up his sleeve he had yet to play.

## BADGES

On August 1, 2012, Zuckerberg announced Facebook's latest development: a new core application called *Badges*. Just as Facebook's other flagship apps like *Photos*, *Music*, and *Events* helped us share different parts of our lives with each other, *Badges* would let us commemorate and share our experiences through a system of digital awards. These would serve as virtual versions of physical objects such as trophies and medals that were used to recognize accomplishments. For example, when people bowled a perfect game, instead of adding their names to a plaque, a bowling alley could give these players badges on Facebook. The result would be just as permanent, but unlike a plaque, badges were free, instantaneous, and easily shared.

Illustration: Badge announcement



**Christina Redfield**

earned a new badge from **Midnight Lanes**



**300 Club**



Sports & Recreation

Earned by bowling a perfect game during regular league play.

June 15 at 10:50 pm [Like](#) · [Comment](#) · [View Badge](#)

7 people like this.

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**Christina Redfield** Thank you! You're next!

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*Badges* was completely open. Anyone on Facebook could create a badge and award it to anyone else for any reason. A wife could make a *Snuggling World Champion* badge and give it to her sweetheart on their anniversary, or a critic could award a *Complete Waste of Time* badge to a movie he hated. Recipients got to choose which badges they wanted to share with others, and the six they marked as a “Top Badge” would appear on their main Facebook profile page.

Illustration: Top badges of a high school sophomore



## FUN AND GAMES

Just as with every other advancement in social networking, most of the business world did not know how to fit badges into their strategy right away. However, one industry knew exactly what to do, because virtual awards had been a major component of video games for years.

In general, they were known as “achievements,” and they were given to players for reaching specific goals, such as attaining a certain score or completing a challenging task. Earning significant achievements gave players a sense of accomplishment and bragging rights among fellow gamers, and often unlocked new game content or features. Literally millions of different virtual awards already existed in the form of video game achievements. Practically every game had them. Even free mobile games designed to kill a few minutes at a time had dozens of achievements.

The games people already played on Facebook typically had more achievements than any other type of game, but this wasn’t necessarily a good thing. To developers of social games, each achievement was an opportunity to get players to share the news with their friends, thus giving the game free advertising, so they loaded their games with an obnoxious number of them. For the first year after *FarmVille* was released, for example, many users found their News Feeds flooded with messages about what their friends had been doing on their farms, and these types of announcements were frequently cited as one of the most annoying aspects of Facebook.<sup>79</sup>

Facebook had quietly made some changes in 2010 that hid most game notifications from people who did not play them,<sup>80</sup> so many people forgot about them. But then, two years later, they started showing up again, only this time as badges. The format for game notifications was so similar to badges that it only took a few lines of code to make the switch, which most Facebook game developers did within a day or two. The resulting deluge of badges gave this new application a bad first impression.

Soon, people who played Facebook games had extensive collections of badges for those games, but nothing else, while those who did not play had few badges, if any. Understandably, this left many with the idea that *Badges'* only purpose was to support games, and critics complained that badges were trivial and irrelevant. Zuckerberg addressed these concerns with a Facebook post:

*Facebook's mission is to make the world more open and connected. We believe Badges will help accomplish this goal by providing a unique way to define and strengthen the relationships we have with the people and interests that matter most to us.*

...

*We are very pleased that so many developers have already integrated Badges into the great games they make on the Facebook platform. I also understand how this has made Badges seem limited, so I would like to take this opportunity to reassure you that soon Badges will be about far more than just games.*

*Each day we hear of exciting new ways people are planning to use Badges to help Facebook users connect and share their experiences. Although Badges is free to use, it will still take time for organizations to assemble the infrastructure required to support these programs. Eventually there will be badges for practically everything that is important to us. In the meantime, I humbly ask for your patience.*

Coming from anyone else, claiming that “there will be badges for practically everything” may have sounded delusional. However, Zuckerberg had a long track record of accurately predicting online behavior ahead of the curve, delivering features users didn’t know they couldn’t live without until they tried them. Proving the skeptics wrong, more prestigious badges soon appeared, just as promised.



## BETTER BADGES

Harvard University, Zuckerberg's alma mater and the birthplace of Facebook, became the first institution of higher learning to give badges that served as digital diplomas. Soon after the *Harvard Graduate* badge, there was a rapid influx of other desirable badges, such as *Eagle Scout* from the Boy Scouts of America, *Bestselling Author* from The New York Times, and *Rhodes Scholar* from the University of Oxford.<sup>81</sup>

Building on the application's growing success, Facebook rapidly added new features to *Badges* throughout the next year. The first update, for example, let users visually arrange their badges into customizable collections like "Athletic Awards" and "Professional Achievements," then share those groups with different sets of Facebook friends.

On the back end, Facebook released *Motivate*, a suite of tools that helped companies make better use of the vast quantities of data generated by the badges they developed. Some tools were analytical, providing anonymous, aggregate information about the people who earned particular badges, while other tools helped them interact more effectively with individuals or create more sophisticated achievement systems. For instance, developers could use *Motivate* to assign point values to badges and define point totals that triggered other awards, or they could create visual achievement paths that illustrated how minor badges formed intermediate steps toward earning major badges.

For example, the band Manifesto Five had an active fan base who referred to themselves collectively as "The Renegade Army." The band formalized this by making sets

of badges for activities like attending concerts, buying albums, sharing songs with friends, or donating to the band’s favorite charity. As fans collected more badges, they were promoted to various military-style ranks.

Illustration: Achievement path from Manifesto Five<sup>82</sup>



Those who earned the top badge in all categories received the band's highest honor: the *Renegade Commander* badge. Other achievement paths were much harder to complete. For instance, the World Taekwondo Federation created a system of badges for the hierarchy of ranks traditionally awarded to practitioners of its martial art. These range from the relatively easy-to-obtain *White Belt (10th gup)* badge to the venerated *Grand Master (9th dan)*, which typically takes 40 or more years of constant training to obtain.<sup>83</sup>

## SYSTEM INTEGRATION

Facebook also soon introduced an interface for integrating *Badges* with other systems, which allowed awards stored elsewhere to be automatically converted into badges. Again, some of the first to take advantage of this new feature were video game developers. Microsoft's *Xbox Live* and Sony's *PlayStation Network* already had two of the most intricate achievement systems ever created. These kept track of every achievement players had ever earned in their console games, and both companies quickly made these available as Facebook badges. Other notable early adopters included Nike, whose innovative *Nike+* system gave awards for exercise based on data recorded by special wrist or shoe sensors,<sup>84</sup> and Foursquare, which collected information about people's whereabouts via their mobile phones and gave badges based on where they went.<sup>85</sup>

The newfound ease of integration created a massive influx of prestigious badges as organizations made entire databases of past awards available on Facebook. The Nobel Foundation, for example, created badges for all laureates since they awarded their first prizes in 1901. Guinness World Records gave a badge to everyone who had ever held

one of their records, and the International Olympic Committee made badges for all medalists since 1896.

With *Badges*, Facebook became a convenient way to display verified credentials. Following in Harvard's footsteps, virtually every college and university began offering badges to graduates. Professional organizations from the American College of Surgeons to The National Association of Realtors created badges for the certifications they bestow. *IMDb.com* made badges not only for entertainment award winners, but for nominees too, as well as every role in Hollywood. Everyone listed in the credits of any TV show or film throughout history got a badge. Other organizations provided badges for companies to display on their corporate Facebook pages and websites, such as the *Best Buy* badge from Consumer Reports, the *Car of the Year* badge from Motor Trend, or the *Excellence in Customer Service* badge from J.D. Power & Associates.

Zuckerberg was right. From placing second at a debate tournament to becoming a licensed chiropractor to winning a Grammy, everyone wanted to share their accomplishments. By the end of 2013, most institutions that gave awards or professional certifications had started a badge system.

## **FOCUSING ON THE FUTURE**

Despite being a new feature, at first badges were mostly used to share old news. In the beginning, people worried about getting credit for things they had already done, making sure their online profiles accurately reflected their past accomplishments. Since its release, the *Badges* panel that appeared on people's profiles showed the six badges they had selected as a "Top Badge." Most users chose to

highlight their crowning achievements, even if they had happened years ago, and these tended not to change often.

Helping people keep up-to-date was one of Facebook's primary goals, so the company made a small tweak to help nudge people forward. Along with the other changes, Facebook added several new views to the *Badges* panel. The "Top Badges" view already answered the question: "What are you most proud of?" However, new views like "Most Recent," "In Progress," and "Lifetime Goals" respectively answered other vital questions like "What have you been up to?," "What are you working on now?," and "What do you want to do with your life?" Facebook made "Most Recent" the default view, effectively shifting the focus from past accomplishments to current events, and in the next few weeks, *Badges* activity rose to a frenzy as people scrambled to acquire new awards.

Illustration: Lifetime Goals badges of a college senior<sup>86</sup>



## ACHIEVEMENT MARKETING

With constant media attention, badges were the hottest trend in social networking. Most companies had previously struggled to give customers a reason to connect with them on Facebook, but *Badges* changed the game. “Achievement marketing” was the business buzzword of the decade, and the new holy grail of branding was creating a badge that consumers wanted to earn and show off.<sup>87</sup>

When Apple released a new *iPhone* or *iPad* model, it gave an *Early Adopter* badge to customers who bought one within the first two weeks of its release, but other companies did not have such a strong following.<sup>88</sup> Even those with popular brands had to work harder to create desirable badges.

Gold’s Gym, whose tagline is “Know Your Own Strength,” offered badges in five-pound increments for a variety of lifts, a move that brought tens of thousands of bodybuilders and athletes in for a special session with a weight trainer to verify their capabilities. Also highly valued were their *Gym Rat* and *Gym Junkie* badges, which could only be displayed by people who had signed in to a Gold’s Gym at least four or eight times, respectively, in the previous month.

Expedia, the world’s largest online travel company,<sup>89</sup> created a free Facebook app called *World Traveler*, which combined the *Photos*, *Notes*, *Badges*, *Map*, and *Timeline* features to create detailed travel journals. By simply uploading photos from a GPS-enabled smartphone, *World Traveler* produced beautiful, well-organized blogs that chronicled entire trips, complete with interactive maps. The app also awarded badges to users based on their

travels, which one reviewer called “a worldwide scavenger hunt that’s kind of like geocaching, but easier.” For example, visiting five specified points of interest in Paris would earn the *City of Light* badge. Traveling to four cities in Spain gave the *Aficionado* badge. *European Visitor*, *European Traveler*, and *European Explorer* were earned by visiting one, then three, then seven countries in Europe. This continued all the way up to *World Explorer*, which was given only to those holding *Explorer* badges from six continents.

Facebook’s tools made it easy for businesses of all sizes to create badges that appealed to their customers. Soon, not only multinational companies were incorporating *Badges* into their marketing plans, but small businesses got in on the action as well. And due to the viral nature of the internet, many good ideas designed for local audiences blossomed into larger trends.

A climbing gym in Utah built such a good badge system for its members that the American Recreation Coalition used it as a model for a larger system for climbers worldwide. The Big Texan Steak Ranch in Amarillo, Texas offered *The Big Texan* badge to any diner who consumed its signature 72-ounce steak in one sitting.<sup>90</sup> This caused such a buzz that the Travel Channel created badges for every meal that Adam Richman had ever eaten while hosting the reality show *Man vs. Food*. Soon other famous foodies used badges to make lists of dishes to try, film critics identified the most essential movies to watch, and golf pros named the best courses to conquer, each one creating a bucket list that let fans emulate the people they admired.

KIIS FM, a Los Angeles radio station, created a *Music Lover* badge that listeners could earn by answering a few

trivia questions each month on the station's website. Each day, the station would call people who had earned that month's badge to award them a small prize just for playing, or a much more valuable prize if they had put *Music Lover* in their Top Badges collection. This provided an incentive for listeners to display the KIIS logo prominently in their profiles, a modern version of similar contests that required a radio station T-shirt or bumper sticker. The promotion was such a success that most of the other 850 radio stations owned by Clear Channel Communications soon offered their own *Music Lover* badges.<sup>91</sup>

These radio station promotions were some of the first examples of offering additional benefits for earning a badge. In the beginning, apart from a few loyalty programs, it was rare for badge recipients to gain anything apart from the badge itself. This changed when Facebook improved the *Badges* application again. Previously, the only people who could see a badge were the friends with whom the recipients chose to share them. After the update, though, other apps could ask users for permission to access their otherwise private badge collections to confirm that they had earned specific badges from third parties.

This change confused many users and caused alarm among privacy advocates, who claimed that no good could possibly come of various corporations having access to records of our personal experiences. What happened throughout the following year proved otherwise, however, as the American Red Cross taught the world a lesson about partnership by using Facebook *Badges* to revolutionize the way we think about online marketing, raising an army of new volunteers in the process.



## THE AMERICAN RED CROSS

Although the *Motivate* tools were designed for marketers, they also happened to be exactly what non-profit organizations needed to tackle some of their toughest problems, like recruiting and engaging supporters. Curiously enough, some of the largest advances in achievement marketing originated with a charity founded in the 1800s.<sup>92</sup> Nobody set more precedents or shaped the way badges were used more than the American Red Cross. Following are some of its most successful tactics, which are still in use today and have been copied by countless other organizations.

### THE RED CROSS SUPPORTER BADGES

To begin, the Red Cross developed an effective and motivating achievement system using a few basic badges with various point values. For instance, the *Blood Donor* badge, given to anyone donating a pint of blood, was worth 100 points. The *Red Cross Volunteer* series of badges were worth 50 points per hour, and the *Red Cross Donor* badges came in a set of colors that represented increasing amounts of money, with one point per dollar donated.

The Red Cross also awarded various *Supporter* badges based on the number of points people had earned. The basic *Red Cross Supporter* badge required 200 points; *Bronze Supporter* required 1,000; *Silver Supporter* required 5,000, and so on. Although these badges were based on lifetime totals, people had to keep earning at least a small number of points each year to maintain them.

Finally, the Red Cross formed partnerships with dozens of corporations to provide rewards to supporters while shopping online. By logging into their Facebook accounts

during a checkout process, those with *Supporter* badges gained access to exclusive benefits. A few companies provided flat discounts, but most offered perks in the form of free upgrades or reduced fees.

For example, anyone with a *Red Cross Supporter* badge got a dollar off convenience fees from Ticketmaster, and better badges offered even better rewards. Enterprise Rent-a-Car gave a free vehicle upgrade to those with a *Silver Supporter* badge, and United Airlines waived the first checked bag fee for domestic economy class tickets for holders of the *Gold Supporter* badge. Those who gave to the Red Cross effectively joined a worldwide discount club founded on the concept of giving special treatment to people who helped others, a fundamental practice reminiscent of the military discounts that were common in the 1900s, but later disappeared.

The basic achievement system the Red Cross designed was simple, but contained several important elements that explain why it was so widely emulated. Between the upgradable *Supporter* badges, their benefits, and the yearly minimum required to retain those benefits,<sup>93</sup> the system included many different incentives to keep giving. It also provided multiple ways to earn the same badges. The entry-level *Supporter* badge could be earned by donating blood twice, volunteering for four hours, donating \$200, or any mixture thereof. The Red Cross made this point by asking first-time blood donors if they wanted to donate \$100 to get their *Supporter* badge immediately. This flexibility not only neatly skirted privacy issues that some had regarding donating blood (or money, for that matter), but also appealed to a much broader

audience than narrower efforts that encouraged only one specific kind of giving.

Also, since the system awarded one point per dollar donated, badges had a clear cash value. This allowed savvy supporters to earn badges “worth” thousands of dollars purely through volunteering, which, in turn, increased the perceived value of those activities. The Red Cross enhanced this effect further with a bonus point system whereby successive donations of time or blood increased in value. For example, each pint of blood donated was worth 25 points more than the last. Similarly, while the first hour volunteered was worth 50 points, the second was worth 51, and so on. Continually increasing rewards created yet another incentive to keep giving and reflected the higher value of experienced volunteers and donors.

Bonus point systems like this gave loyal supporters with limited incomes access to the same honors as the wealthy. A person who volunteered eight hours a month for a year or gave blood every two months for four years earned 10,000 points and received the *Gold Supporter* badge – the very same award given to people who donated \$10,000. This leveled the playing field between socioeconomic groups, ensuring that their achievement system truly offered something for everyone.

Many volunteer organizations today still use achievement systems that are strikingly similar to this model. Several well-known non-profits have built systems that equate one point to a dollar, reward entry-level volunteer work with 50 points per hour, and provide tiered badges with rewards from retail partners, just like the Red Cross. Giving benefits to customers who have earned badges from charitable organizations encourages people to be generous

and reinforces a brand's connection to a good cause in the process. Achievement marketers call this "supporting the supporters," and today it is rare to shop anywhere without seeing perks that can only be gained through charity or public service.

Most retailers form partnerships with non-profit groups that complement their business. Petco, for instance, gives discounts to people with the *Animal Rescuer* badge from the American Society for the Prevention of Cruelty to Animals. Amazon similarly gives free shipping upgrades to school teachers and those with the *Reading Tutor* badge from the National Institute for Literacy. Before *Badges*, coordinated efforts between corporations and non-profits like these used to fall somewhere between expensive and impossible, since implementation costs outweighed the potential gains of either party. The Red Cross pioneered a dirt cheap, yet highly effective method of using Facebook to form mutually beneficial partnerships, which ultimately helped create the modern expectation that corporations should give special treatment to altruistic people.

### **THE INDONESIA RELIEF PROVIDER BADGES**

When natural disasters occur, the world relies on the Red Cross to provide food, shelter, medical care, and other humanitarian services. To accomplish this, they must quickly raise massive sums of money, with a large amount coming from people who do not regularly donate.

One tactic the Red Cross used to encourage casual contribution was collecting donations via mobile phones. In 2010, they set a record for the most successful mobile fundraising campaign, collecting over \$32 million within a month after a devastating earthquake struck Haiti.<sup>94</sup>

Encouraged by their success with this method of fundraising, the Red Cross aimed to top that record. Not knowing what the next disaster would be or when it would occur, they created a series of placeholder donation achievements. The Red Cross then formed partnerships with all major mobile service providers to allow them to award these badges immediately to customers who donated via text message.

Their preparation paid off. When a series of tsunamis struck Indonesia in 2014, the Red Cross was ready to spring into action. They quickly released bronze, silver, and gold *Indonesia Relief Provider* badges for donating \$5, \$10, and \$25. Within half an hour of the first giant waves hitting the Indonesian shores, the badges were available to the public. News organizations covering the disaster promoted the badges around the clock, urging anyone donating \$25 or less to do so via text message to help keep phone lines open.

Public response was overwhelming. The Red Cross shattered their previous record in just six days. The media, eager for a positive angle after reporting on the disaster for a week, began covering the mobile fundraising campaign itself. Many news outlets focused on how a trend of charity swept college campuses. Students, they said, represented the perfect blend of caring deeply about badges, being comfortable with donating via text message, and being motivated by peer pressure. Indeed, students raced to appear informed and socially conscious by being among the first in their social networks to display the *Indonesia Relief Provider* badges. An estimated 4 million college students donated in the United States via text messaging alone. However, as the movement spread virally, it became

obvious that not only college students were prone to being influenced by their peers, as similar effects were seen in nearly all social groups, particularly religious and service organizations.

With constant media attention fueling the fire, the Red Cross raised more than \$100 million via mobile donation in the first month – over triple their previous record. By offering a desirable reward, they turned impulse donating into impulse buying, providing a mechanism for spreading awareness along with a healthy dose of instant gratification. At the time, sending a text message and then receiving a badge on Facebook within seconds was a novel experience, even to social networking veterans.

The Red Cross clearly demonstrated the effectiveness of offering badges for small, one-time donations, and countless other organizations followed their example. Notably, the March of Dimes Foundation formed partnerships with large grocery store chains to offer instant badges through their point-of-sale payment systems, and the Muscular Dystrophy Association made similar partnerships with several banks to make their badges available through ATMs.

This trend led to some unexpected consequences. A group of sociology students in New York created an achievement system for a local homeless man and then gave him a smartphone and a Square mobile credit card reader, enabling him to sell the *I Gave a Dollar to Harry* badge to passersby while panhandling. Harry became a minor celebrity and could soon afford an apartment, thanks to the tourists who lined up at his corner near the Empire State Building to get their badges. Although the intent of the project was to deliver social commentary, it showed that

offering badges could increase any kind of generosity, but also suggested that people would soon expect rewards for even the smallest good deeds. The trends started by the Red Cross continued to the point where all requests for casual donations came with offers of instantly delivered badges, whether they were given via text messages, interactive television commercials, or tablet computers held by door-to-door solicitors.

### THE CPR CERTIFIED BADGE

In 2004, Blizzard Entertainment released *World of Warcraft*, an online computer game in which people assumed the roles of heroes traveling through a fantasy environment, battling monsters, completing quests, and interacting with other players. In 2010, over 12 million people paid monthly subscription fees to play *World of Warcraft*, making it the most popular game of its kind.<sup>95</sup>

To the Red Cross, these players were ideal candidates for CPR training. In general, gamers were not only young and had good hand-eye coordination, but they also valued virtual achievements. Furthermore, it would have been difficult to find an audience more motivated by such achievements than the *World of Warcraft* universe. Whereas most video games at the time had an average of about 40 achievements each, *World of Warcraft* had thousands,<sup>96</sup> many of which were obtainable only by large groups of skilled players working together for weeks or longer, and still many players strove to complete them all.

In 2014, the Red Cross worked with Blizzard to promote CPR within the *World of Warcraft* universe. To that end, Blizzard created the *Stayin' Alive* achievement, which they awarded to players who earned the Red Cross CPR

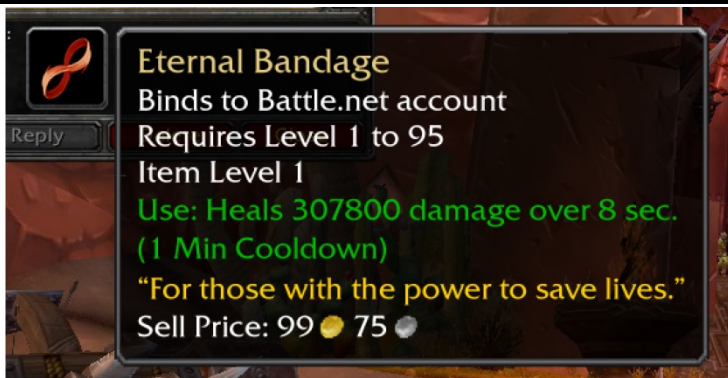
*Certified* badge. (The title was a reference to the Bee Gees' 1977 disco hit, which is often used as a teaching aid since its catchy beat matches the ideal rhythm for CPR chest compressions.)<sup>97</sup>

Illustration: Stayin' Alive achievement



In addition to the achievement, players also received three in-game rewards. The first was the “Rescued Dragonhawk” mount, a creature they could ride to fly around the world. The second was the “Tabard of the Savior,” a piece of virtual clothing emblazoned with a red cross that players could put on their avatars to alter their appearance. The final reward was the “Eternal Bandage,” which healed damage sustained in combat. Unlike regular bandages, it was reusable, saving players the hassle and expense of making single-use bandages out of valuable virtual cloth.

Illustration: In-game reward item



These rewards were highly desirable to *World of Warcraft* players, and within a year, nearly a million of them had



earned the *Stayin' Alive* achievement. This dwarfed the response to a previous charitable in-game promotion through which Blizzard sold about 220,000 virtual pets and split the proceeds with the Make-a-Wish Foundation.<sup>98</sup> Based on a study, the Red Cross estimated that at least 80 percent of players with the *Stayin' Alive* achievement learned CPR specifically to obtain the in-game rewards. One player they interviewed said, “Most of us who play *WoW* do a lot more for a lot less every day.” Said a Blizzard representative:

*We are very pleased with the result, especially considering how inexpensive this was. Any change we make to the game requires development and testing, of course, but the work involved was about one percent of one of our regular updates. The cost-to-benefit ratio was extremely favorable.*

As if that were not enough, later the *CPR Certified* badge played a starring role in another major video game. Since 1997, Rockstar Games had regularly published installments of *Grand Theft Auto*, a series of games in which players assumed the role of a violent criminal. Over time these games became increasingly realistic, and while they had a central storyline, players were free to explore and interact with incredibly detailed city environments. For example, a player could choose to ignore the crime-based plot and work as a taxi driver, carting people around the city for pay before unwinding with a friendly game of pool at a bar. However, more popular activities include mugging people on the street, stealing cars (as the title suggests), and getting in gunfights with the police. As a result, not only was the *Grand Theft Auto* franchise highly successful, selling well over 100 million copies by 2011,<sup>99</sup> but it was

also named the most controversial video game in history for its glorification of crime and violence.<sup>100</sup>

In 2015, Rockstar released *Grand Theft Auto VI*, which took place in Motor City, an urban setting based on Detroit. (Previous fictional locations in the series included Vice City, based on Miami, and Liberty City, based on New York.) Before its release, Rockstar developers coined the term “Reality-Augmented Virtual Environment” (RAVE) to describe Motor City. They touted RAVEs as the future of game design, saying that the environment would reflect reality and would be different for each player. Other than that, they were deliberately secretive and gave no other details, insisting that gamers would have a more satisfying experience discovering what that meant on their own.

Most critics dismissed this as hot air. One said:

*We’ve heard this before. Every new game claims some mind-blowing feature that will revolutionize gaming forever, and every time our minds remain unblown. It’s hard to see how a sequel in an aging franchise is going to be any different.*

If anything, though, Rockstar had been downplaying how advanced the game was, because the virtual world of *Grand Theft Auto VI* changed radically according to what players did in their actual lives. To begin, earning the *CPR Certified* badge unlocked a mini-game in which players could steal an ambulance and drive around town working as a paramedic, earning money by saving lives. (As a salute to Blizzard’s effort to support the same badge, all ambulance radios were set to the “Sounds of the ‘70s” radio station, on which “Stayin’ Alive” frequently played.) But that was just the tip of the iceberg. *Grand Theft Auto VI*

included hundreds of hidden elements that mirrored the player's accomplishments outside the video game world.

Some features could be unlocked in a variety of different ways. For example, players with one of eight different badges related to animal welfare got a pet German shepherd who helped during certain missions. Other content was unlocked by very specific actions. If a player donated five dollars to KaBOOM! – a charity famous for building playgrounds in a day – then within moments, a 20-minute interactive sequence would begin. Work crews would arrive at several vacant lots throughout Motor City, clean up debris, then build parks and playgrounds, permanently altering the city and opening up a series of optional side missions. Sending a text message and then seeing new characters show up in a game a few seconds later seemed a little like magic, even to young people who grew up with the internet and smartphones.

Not all reality-augmented features were related to charity, but most aimed to promote personal responsibility, positive behavior, and a healthy lifestyle. For example, players who earned any of about 50 popular physical fitness achievements were able to run faster and hold their breath longer underwater, both of which came in handy regularly throughout the game.

Each person who played the game had a unique experience that was personalized to his or her life story. The main plot alone contained 40 major events that occurred differently based on badges, which meant there were over a trillion possible storylines. Some differences were small, but others were profound. For those who earned the *Big Brother* or *Big Sister* badge from Big Brothers Big Sisters of America, rather than being an only child, the main

character instead had a younger sibling, who showed up in the final act of the game to offer much needed help.

Since the game was intended for adults only, Rockstar designed it under the assumption that most players would have at least a few badges that unlocked hidden features that made it easier. One reviewer called *Grand Theft Auto VI*:

*...a nearly perfect game, but frustratingly difficult ... next to impossible to complete without turning the game off, exiting your house and becoming a better person.*

Dan Houser, the game's writer,<sup>101</sup> addressed this comment in an interview, saying:

*Yes, the game is pretty brutal if you're a selfish person. But if you just go out and do some nice things, life gets a lot easier and more enjoyable. We feel this reflects reality.*

In the same interview, Houser attributed much of the credit for the game's new structure to the Red Cross:

*We looked at what they did with Indonesia and then what they did with Blizzard, and we asked, 'What can we do with this?'*

They soon learned the answer: Quite a lot. In the first two years, *Grand Theft Auto VI* sold over 25 million copies. According to Rockstar's estimates, which combined cash donations with volunteer hours, the average player unlocked about \$68 worth of charitable content. This meant that, as a whole, players of *Grand Theft Auto VI* gave about \$1.7 billion worth of time and money to charitable causes.

According to Houser:

*It's impossible to know how much people did just to unlock additional content and how much they would have done anyway, but what we do know is that every single charity we promoted got a bump after we released the game. We know we made a big difference – 400,000 players in three months didn't just happen to give five bucks each to build new playgrounds by pure coincidence.*

...

*We admire all the charities we promoted, but we knew from the start that none of them could be formally associated with the game because it's too controversial. We didn't even bother asking because we knew they'd have to decline.*

*That's the beauty of the Facebook model. We wanted to do something good, and we didn't have mountains of red tape stopping us. We didn't have to ask anyone for anything. We just did it on our own.*

*Nobody would have wanted to be our official partner, but nobody complained about all the money suddenly pouring in to their charities, either.*

...

*Actually, I think we set the bar pretty high. I mean, if a game about stealing cars and organized crime can have a positive impact on society, there's no reason every other game out there can't do the same.*

Designing games with optional downloadable content (DLC) was already one of the biggest trends in gaming, except previously the only way to unlock it was to pay extra money. This new model of awarding virtual goods based on real-life criteria became known as action-based content (ABC), and it added an exciting new dimension to gaming experiences by connecting the real and digital worlds.

Between *Badges* and advances in payment technology, developers began adding more optional content to their games than ever before. Much of it was still offered as paid DLC, as this was highly lucrative for game companies. However, the ABC model pioneered by Blizzard and Rockstar added a positive twist, a way to trade special features for good deeds, which had a pronounced effect on young people.

Back in the early 2000s, 97 percent of American teens played video games regularly<sup>102</sup> and many cared a great deal about what happened in them.<sup>103</sup> In fact, they already saw life as one big video game;<sup>104</sup> *Badges* merely formalized their worldview. To them, performing actions in real life to earn rewards in a video game made perfect sense.

In the coming years, the industry changed to follow the examples set by *World of Warcraft* and *Grand Theft Auto VI*. By the late 2010s, almost every major video game included features that were unlocked through Facebook badges earned for supporting non-profits, which meant that young people were bombarded daily with strong incentives to act charitably. As this population aged, they never stopped playing, which meant they also never stopped giving. With a single game able to make over a billion dollars' worth of impact, analysts estimate the value of time and money donated because of video games reaches well into the trillions annually.

## OUR LIVES IN OUR POCKETS

As with every advance in technology, badges became less and less novel over time, and eventually just another part of everyday life. While once a new concept, *Badges* turned into something far more mundane, but useful: a convenient way to share verified information. One journalist wrote:

*Whether you are checking out a new hire, an old flame, a political endorsement or a company's environmental record, badges are about the only things on the internet that you can know are true.*

Facebook wanted to capitalize on its new position as a source of trusted information. In 2014, it introduced another new application, Facebook *Identity*, which allowed users to store sensitive data with their online profiles, such as credit account numbers and contact information, as well as electronic versions of important documents like driver's licenses and passports.

At the same time, Facebook also began selling *Identity* keys. These were small, inexpensive keychain attachments that enabled people to connect to their Facebook accounts by waving the device near a sensor. With such high demand for badges, this would let people check in even faster and easier with companies who provided these sensors, and it would also enable more complicated transactions for users who shared more data. Biometric methods such as thumbprint or iris scans provided additional security, and when confirming someone's identity personally, instead of just a tiny a driver's license photo, the app also showed larger images or even video from Facebook.

Illustration: The original Facebook Identity key<sup>105</sup>

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The keys were cheap, easy-to-use, and more secure than any other method of identification. The tiny amount of power they required came from a battery that recharged with the kinetic energy generated by moving around. This meant that they would theoretically last a lifetime – certainly until advances in cryptography required them to be replaced with newer versions. As such, they were encased in tamper-proof blocks of solid acrylic which, when cut, broke an internal membrane that destroyed the chip inside. Plus, this chip did not store any personal information – just an encrypted ID number – all the sensitive data was locked away on Facebook’s secure servers. (Even that ID number was never shared. Instead, the chip used it to generate single-use security tokens.)

If an *Identity* key were lost or stolen, a host of safeguards made it practically useless to anyone but its rightful owner. It could not be surreptitiously scanned since it needed to be very close to a sensor to operate. If any misuse somehow occurred, fraud detection algorithms and crowdsourced monitoring would catch it almost immediately.



With *Identity*, Facebook had created the most advanced personal identification system in history. The only major downside was that it required sensors; however, the system was based on open standards that had been around for years, so a wide variety of inexpensive sensors were already available. Also, Facebook provided free software that could turn any modern smartphone or tablet into an *Identity* sensor.<sup>106</sup> Building on proven technology not only increased interoperability, but also saved Facebook the expense of inventing a proprietary system. In all, Facebook spent less than \$100 million on research and development for *Identity*.

Although they created an impressive product, it took time to catch on. The keys were an instant hit in some parts of the world, but the initial response in the United States was lukewarm. The American market was stuck in the frustrating situation all too familiar to emerging technologies: Companies did not want to invest in identification sensors without consumer demand, but consumers did not want to waste money on a keychain decoration that had no utility yet. Furthermore, many consumers were mistrustful or even fearful of *Identity*, even though it just stored information people already carried around in their wallets and purses, plus it kept it in a far more secure format.

This continued until 2015, when the Transportation Security Administration issued the results of a yearlong study exploring new methods of identification at airports. Their research showed that travelers could be processed faster and more accurately with *Identity* than with traditional methods. The report concluded that the keys

should not only be accepted at airports, but encouraged. At a press conference, a TSA spokesperson said:

*...[Facebook Identity] is the most secure method of identification available. Just because it was developed in the private sector doesn't mean we shouldn't adopt it. It's already out there, it's cheap, and it works. It's not perfect, but it is much harder to forge than a driver's license.*

Airports began installing *Identity* sensors, and just as the report predicted, the lines for travelers with keys moved much faster. What's more, the people waiting in the slower lanes took notice. As soon as word got around that *Identity* was a ticket to the fast lane through airports, the floodgates finally opened and key sales skyrocketed. This spike in distribution was the catalyst needed to get other industries to start adopting them as well.

Bay Area Rapid Transit, the San Francisco area subway system, was one of the first to integrate *Identity* by allowing riders to add travel funds to their Facebook accounts rather than to paper cards. The material cost and ecological savings BART reported from the first three months alone was enough to convince virtually every industry that used disposable tickets or magnetic swipe cards to start using *Identity*.

Over the next few years, digital versions of parking passes, hotel room key cards, and concert tickets started popping up everywhere. Companies started charging fees for their old-fashioned paper and plastic counterparts to offset the costs of buying sensors, which added yet another incentive for people to use *Identity*. Membership information for everything from gyms and libraries to insurance providers and grocery store discount clubs started being stored in

*Identity* rather than on cards. And after hotel rooms, *Identity* started replacing the keys to office buildings, gated communities, bike padlocks, and rental cars.

After Facebook licensed its technology, a bumper crop of *Identity*-enabled accessories sprang up, and soon we could use anything from a watch to a flashlight or even a wedding ring as a key. Eventually, mobile device makers started letting users unlock their phones and tablets via *Identity*, where they had already started keeping other useful information. This last group was slow to win over, because Facebook wasn't the only company trying to make wallets obsolete. In fact, legions of companies were working to digitize everything we used to carry around and store it as data in our phones instead.

Coupons and gift certificates were some of the first to go. Groupon was the largest in this category, but its business model was so simple that copycats sprang up like weeds, each with its own angle. For pet lovers, there was Coupawz. For the Kosher crowd, Jewpon. For brides about to be married in Austin, Texas, there was a site just for them, too.<sup>107</sup> Within a couple of years there were so many that aggregators ended up combining deals from 500 or more Groupon clones at a time.<sup>108</sup> After dipping its toe in the water with a brief pilot program in 2011,<sup>109</sup> Facebook didn't re-enter the daily deal arena until it had something new to offer, which came in the form of promotions custom-tailored using data from *Badges*.

But coupons were just a drop in the bucket. The real prize in the wallet was the credit card.

## THE BATTLE FOR OUR WALLETS

At one point it seemed inevitable that we would all soon be paying for everything with our phones instead of cash or swipe cards,<sup>110</sup> and whoever enabled this commerce would stand to make a fortune.<sup>111</sup> Banks and credit card companies had made billions annually with a near monopoly on transaction processing fees, but these new mobile payments were up for grabs.<sup>112</sup>

From a Nokia mobile phone running Microsoft software on AT&T's network, a customer could buy an LG refrigerator at Home Depot using PayPal, which in turn charged a Visa credit card issued by Wells Fargo. For a transaction like this there were eight different companies who each wanted to claim the customer as its own. When social networks, referral programs, and marketing affiliates were involved, that number could grow to over a dozen.

Trillions of dollars were on the table and everyone wanted a cut. In the early 2010s, along with some promising startups, almost every major credit card issuer, e-commerce company, wireless carrier, device manufacturer, retailer, and mobile software maker was working to develop its own payment system.

Most were based on near-field communication (NFC), a form of short-range wireless communication. Apple, Google, and Microsoft were each building virtual wallets that supported NFC directly into their mobile operating systems. Verizon, AT&T, and T-Mobile had teamed up to make a similar system called Isis. Unhappy with any of the options available, a group of retailers led by Wal-Mart and Target was building yet another one.<sup>113</sup> Although not NFC-

based, even Starbucks had its own mobile payment system.<sup>114</sup>

As opposed to many of the other companies Facebook had competed with in the past, these weren't young social media dotcoms with vague business plans and questionable revenue.<sup>115</sup> These were experienced heavyweights like Apple, Amazon, and American Express, multinational corporations with billions to lose. By the time Facebook showed up, these giants were already embroiled in an all-out war for our wallets.<sup>116</sup> Their fight for control got ugly, and we, the consumers, often ended up paying the price.<sup>117</sup>

For example, shortly after Google *Wallet* was released, the largest US wireless carrier, Verizon, blocked the app from being used on the only phone that could run it. Preventing customers from accessing their own bank accounts with the software of their choice raised a host of legal and ethical questions, especially since Verizon was developing two competing payment systems of its own.<sup>118</sup>

Roadblocks like this made it difficult for any one of the dozens of new payment systems to gain traction. A few types of mobile payment started showing up in national chains, but some of the corporate partnership agreements that got them there also precluded their competitors. For conglomerates who already spent hundreds of thousands of dollars per store to replace employees with sophisticated self-checkout machines, adding another payment option was business as usual. However, 99 percent of companies in America were small businesses,<sup>119</sup> and even after a few years, most were not jumping on board with mobile payments.

The new crop of phones and tablets were amazing, powerful devices, no doubt, but with their power and versatility came the potential for complications that didn't exist with simpler solutions. In a 2014 interview with *Fortune*, Jim Rockelson, the owner of a small chain of sandwich shops in Florida, explained why businesses like his were reluctant to adopt any of the new systems:

*My dad ran this shop for over 20 years before he even took credit cards. Whenever I asked him why not, he always said, "That's not the right question. You tell me why I should."*

*Most of the other guys around here are like my dad. What they have works fine and they see no reason to switch. Me, I thought I knew better. So I tried them all. At one point my counter had maybe nine different little payment gadgets that we almost never used.*

*Even when we did, it was a headache. They say they make everything faster and easier, but that's only when things go perfectly. I'll tell you why I went back to credit cards...*

*Customers don't hold up the line because they get a "really important" call on their credit card in the middle of a sale.*

*They also don't tell me to hang on while the software on their credit card updates itself.*

*I don't get customers who fiddle with their credit card for five minutes, trying to figure out why it isn't doing what they want, then blame me when it doesn't work right.*

*I don't get customers complaining that their credit cards don't get reception in my shop. Credit cards don't get viruses, and they don't run out of batteries because someone was watching TV on them.*

*Oh, and my favorite: I never have to wait while some guy reboots his credit card because it froze for whatever reason.*

*These problems happened all the time. People come to this complex for lunch because there are six restaurants right here. If my line gets too long, they just leave and go next door.*

*If I am going to risk my business on something, it can't cause delays like that. Any system that makes people pay with their own phones is going to run into these same problems.*

Jim brought up a great point: Every new payment system required people to use their own phones and tablets. But was this really necessary? If only one smart device was required to complete a smart transaction, couldn't a smart merchant provide it?

Put another way, which made more sense: Having a million customers bring a million different payment devices to a merchant? Or having that same merchant provide one reliable payment device for a million customers to use?

It was not surprising that the companies who made money from phones and tablets were pushing the option that required millions of devices. Facebook had been working on making its own phone, but pursuing this strategy could have been a costly mistake.<sup>120</sup> Rather than stepping into the middle of a war he couldn't win, Zuckerberg took a different route that circumvented the fight altogether. While the competition was busy designing a dozen different wallets, he built a giant locker in the cloud.

For all their bells and whistles, most phone-based digital wallets were still built on the very old concept of carrying our personal information around with us.<sup>121</sup> But as these

devices got more complex, they fell victim to the same flaws as personal computers. New vulnerabilities were discovered every day. Apple's best efforts at securing its *iPhones* were repeatedly foiled by a teenager.<sup>122</sup> They were powerful, but that didn't mean they were the right tools for the job.

Zuckerberg recognized that the best place to store sensitive information was on secure servers in the cloud. The only missing piece was a bulletproof way for customers to identify themselves, a problem he had solved with *Identity*. He also recognized that as other companies came to this same realization, which technology we chose to access our data would become irrelevant compared to which company we chose to store it. Accordingly, Zuckerberg worked to give us every reason to choose his company as it developed its own mobile payment system, Facebook *Commerce*.

## FACEBOOK COMMERCE

Facebook had the luxury of time to perfect *Commerce* because in the battle to replace credit cards, no one was winning.<sup>123</sup> In 2012, NFC had actually been around for almost a decade,<sup>124</sup> but lack of cooperation between the stakeholders kept it from taking off.<sup>125</sup>

There were already more active mobile phones in America than there were people.<sup>126</sup> Most mobile customers had smartphones, and most of those ran on the *Android* operating system.<sup>127</sup> Yet even a full year after Google introduced *Wallet*, it only worked for people with a MasterCard from Citibank, mobile service through Sprint or Virgin Mobile, and one of six specific phones with an NFC chip, which over 99 percent of phones lacked.<sup>128</sup> Those with any other credit card, bank, wireless carrier, or



mobile device were out of luck. For the few who met all the requirements, *Wallet* was still accepted only by select merchants who had NFC sensors connected to their point-of-sale systems. Even by the time Google added support for other credit cards,<sup>129</sup> it still meant that the payment method built in to the most popular mobile operating system only worked for a tiny fraction of a percent of its users.

Over the next few years, more customers became able to pay with their phones at select supermarkets and big-box retailers, but chances were that the local auto garages, veterinary clinics, and dry cleaners still only took cash and credit cards. Plus, as devices kept getting more powerful, they drained battery power even faster. People still needed to carry credit cards in case their phones ran out of juice or could not connect to a mobile or Wi-Fi network.

Also, people were wary of technology. Americans were more concerned about hackers and identity theft than they were about terrorists.<sup>130</sup> We were overly scared of mobile payments, while we never gave a second thought to using credit cards from companies who had been tracking our purchases and selling our consumer profiles for decades. Practically no one wanted their phones sharing information with retailers they visited, especially older people<sup>131</sup> – who also happened to be the ones with most of the money.<sup>132</sup> Indeed, by the time Facebook introduced *Commerce* in 2016, about three-quarters of Americans still were not using NFC-enabled devices to buy goods in stores.<sup>133</sup>

Despite billions spent trying to replace credit cards, people were not ditching their plastic anytime soon. The old model was proving difficult to replace, largely because it

still worked well despite its age. History has shown that convenience is king, and credit cards were very, very convenient. By comparison, paying with a mobile phone took a little more effort and did not offer many unique benefits. One detractor called NFC “a solution in search of a problem,” saying:<sup>134</sup>

*With NFC, you have to take your phone out of your pocket, unlock your phone, possibly enter another PIN, and then wait for it to beep. What’s the value proposition there?*

Credit cards, on the other hand, worked almost everywhere with one quick swipe. Anything that replaced them would have to be just as quick and easy for consumers, of course, but especially for merchants – the ones who would ultimately decide which payment methods would be accepted.

Part of the reason Facebook *Commerce* was so successful was that it didn’t try to fix anything that wasn’t broken. In fact, this revolutionary “new” system was actually just a slight update of the old credit card model, the tried and true method that had enabled smooth transactions with point-of-sale machines since the 1970s.

*Commerce* extended Facebook’s *Payments* system to allow customers to link almost any method of payment to their profiles, from traditional checking, credit, or debit card accounts to newer methods like PayPal and Amazon as well as gift cards, digital coupons, and vouchers.

After customers logged in with *Identity* at checkout, with one tap they could pay using the default rules they had defined (e.g., automatically apply coupons, use Visa for transactions under \$30). Alternatively, all their other

payment options were just a few taps away. No personal information was given to the merchant unless specifically requested by the customer.

Consumers liked *Commerce* because it was just as familiar as using a credit card, only easier, and it helped them save money. To customers, it shared many features with other virtual wallet apps, but for merchants, Facebook's system had many distinct advantages. Merchants liked how reliably *Commerce* worked because it did not rely on customer hardware and software to process transactions – instead, the whole system ran on tablets they controlled. Customers were already signing in with *Identity* to take advantage of deals at any merchant that promoted itself through Facebook (which most did), so paying through Facebook as well saved the whole step of taking out another form of payment. Plus, both customers and merchants liked that special offers like coupons and loyalty programs were not tied to a specific payment method, unlike those found in other digital wallets.

There was a lot to like, but what merchants really loved about *Commerce* was that it was free.

## THE ELUSIVE FREE LUNCH

Payment companies traditionally kept a small portion of each credit card sale as a fee for processing the transaction. Two percent may not sound like much, but for a business that operated on a 10 percent margin, that was a fifth of its profit. And all those little fees added up – to the tune of about \$40 billion a year in 2012 for US banks alone.<sup>135</sup> How could Facebook afford to provide this service for free?

The truth was that banks and credit card companies had enjoyed decades of easy profits by monopolistically fixing

prices to prevent competition and keep their fees artificially high.<sup>136</sup> But thanks to advances in technology, processing credit card transactions had become quite inexpensive. Facebook knew the cost of giving this service away for free would pale in comparison to the value of the data it would receive in return, data it could use to offer unprecedentedly effective marketing opportunities to its advertisers.<sup>137</sup> Overall, it was a small price to pay to become the central hub of the new digital economy.

Merchants were already unhappy about the inflated credit card fees they had been forced to pay. In fact, in 2005, a group of merchants sued Visa, MasterCard, and several large banks for their anticompetitive practices. Seven years later they reached a settlement which, in addition to a \$7 billion payout, gave merchants the right to pass credit card fees on to customers in the form of surcharges.<sup>138</sup> However, this settlement didn't change much, largely because it allowed credit card companies to keep setting fees as usual.<sup>139</sup> As for the surcharges, about 40 percent of the population lived in states with laws that prevented them,<sup>140</sup> and most other businesses didn't charge them anyway since the amount wasn't worth the risk of angering customers.

When a viable option came along that did away with these fees, merchants jumped at the opportunity. All businesses had to do to participate was provide relatively cheap tablets to run *Commerce* at the point-of-sale, which, again, most of them already did for *Identity* check-ins. Furthermore, Facebook did not limit payment options to a short list of approved partners. It just identified people and let retailers interact with them using any method of payment they wished.

Facebook's free service and enormous user base made businesses confident that this small investment would not be wasted. This rapid adoption by merchants let *Commerce* breeze past the other systems, which were held back by a four-way standoff in which customers, merchants, banks, and tech companies were all waiting for the others to pick a clear winner before committing.

Hordes of companies started offering small discounts or gifts to customers who paid with Facebook. After all, with no transaction fees, merchants could give a little extra to these customers and still make more profit. If there is one absolute truth about American consumers, it's that we hate missing out on free stuff. These incentives were just what we needed to shake us out of our credit card habit and reach for our *Identity* key instead.

The banks were not thrilled about losing their processing fees, but due to Facebook's enormous user base, none of them dared to blockade *Commerce*. Most Americans had more than one credit card,<sup>141</sup> and if another one was easier to use and offered special benefits, the bank could kiss that customer goodbye. On the upside, Facebook was giving their customers easy access to their credit and debit accounts without taking a cut, plus the added level of security reduced fraud. It also let banks waste less money manufacturing cards and mailing them to customers. Plus, since *Commerce* was safer and more convenient than cash, it made customers more likely to use their credit accounts for casual spending transactions at locations like vending machines, tollbooths, and fast food restaurants.

Besides, the banks were still making plenty of money from servicing accounts and collecting interest on debt. At least until Facebook started moving in on that business, too.

## BEATING THE BANKS

When Facebook entered the banking industry, the economy was still recovering from the Great Recession, the worst financial crisis of the last century.<sup>142</sup> Previously, in the early 2000s, investment firms were buying mortgages from banks as fast as they could, the riskier the better since they paid higher returns.<sup>143</sup> To feed Wall Street's insatiable appetite for these dodgy loans, the banks stopped caring about credit scores and loan-to-value ratios and started lending huge amounts to anyone with a pulse, because as soon as the loans sold, they became somebody else's problem. The actual details of these loans were so unimportant to banks that they hired "robo-signers" to sign mortgage documents as fast as possible without even reading them.<sup>144</sup>

People who would have never qualified for a mortgage a few years earlier could suddenly buy their dream home. Millions did, and some bought four or five. It is not as if these homebuyers were innocent victims. They too were greedy and irresponsible. Ultimately they were the ones who borrowed enormous sums they could not afford to pay back, which brought the whole system crashing down.

However, the industry professionals had not been doing their jobs. Lenders, regulators, ratings agencies, mortgage insurance providers – they were all supposed to prevent bad debt, but instead they looked the other way and rubber-stamped loans they knew would end in default. Easy credit and low interest rates fueled widespread speculation and rampant price inflation, the classic ingredients of an economic bubble.<sup>145</sup>

The meltdown began in 2007, which prompted an unpopular bank bailout under Pres. George W. Bush<sup>146</sup> and an even less popular stimulus under Pres. Barack Obama<sup>147</sup> which totaled about \$1.5 trillion of taxpayer funds. Later we learned that without telling Congress, the Federal Reserve Bank gave \$16 trillion in loans to international banks at next to no interest, which those banks then exploited to pocket even more profit behind the scenes.<sup>148</sup>

Despite widespread corruption and fraud that cost the global economy trillions, there was little investigation and no one in power was punished.<sup>149</sup> For all the damage they caused, banks went right back to their old habits. In fact, even while the economy was still tanking and unemployment doubled,<sup>150</sup> the same banks that were taking taxpayer bailouts and secret loans from the Fed were also paying higher salaries and bonuses than ever before.<sup>151</sup> And even though banks had promised to stop paying people to forge signatures and sign documents without reading them (both federal crimes), they kept right on doing so and almost no one was arrested.<sup>152</sup>

People were disgusted with the financial industry that had fleeced them and gotten away with it, but they felt powerless to do anything. After the bailouts, the banks that had been “too big to fail” ended up bigger than ever.<sup>153</sup> This not only seemed to reward them for destabilizing the economy, but also left consumers with even fewer options. The public had never trusted banks less or hated them more,<sup>154</sup> which meant that Zuckerberg’s decision to offer a new alternative could not have come at a better time.

## THE COST OF CONVENIENCE

In previous years, many consumers were uninterested in the differences between banks and credit unions, but after the Great Recession, people started paying closer attention to whom they trusted with their money. Credit unions are not traditional corporations, but rather not-for-profit cooperatives where every customer is a part-owner. Since they are not publicly traded, there is no pressure from Wall Street to make risky investments. Credit unions also have lower overhead than banks do. They are tax-exempt and pay comparatively small salaries to their executives,<sup>155</sup> so they are able to offer lower fees and more favorable rates.<sup>156</sup> For example, credit cards from credit unions charge an average of two to three percentage points lower interest than those from other lenders, which not only benefits customers, but keeps bank fees in check due to competition.<sup>157</sup>

However, savings like this usually came at a price. Historically, credit unions had been less convenient than big banks. Regional unions had few branches compared to national banks, and their lower operating budgets also meant they were slow to adopt new technology. For example, in the early 2000s, most credit unions did not offer online bill payment, a service provided by virtually every major bank at the time.<sup>158</sup> Later, they fell even further behind. In 2012, major banks were winning awards for their mobile banking apps,<sup>159</sup> while hardly any credit unions had even released one yet.<sup>160</sup> Nevertheless, after the turbulence of the Great Recession, people had started warming to these safe, no-frills institutions.<sup>161</sup>



## THE ZUCKERBANK

Then, in 2018, Zuckerberg teamed up with a group of investors to establish Facebook International Credit Union (FICU). FICU shook up the financial industry by offering the best of both worlds: It combined the convenience of a big bank with all the advantages of a local credit union, and then some.

Right from the start, FICU offered the lowest fees and best interest rates in the business thanks to its extremely low operating costs. Most of the savings came from its biggest difference: FICU had no physical branches. This is where Zuckerberg was truly ahead of the curve, because by this time, most customers had little reason to visit a bank in person. And unlike smaller credit unions, Facebook had the software development chops to roll out the slickest banking apps users had ever seen.

Back when paper checks still existed, people could snap a photo of them with their smartphones to deposit them instantly. With advanced voice recognition technology, customers could answer most questions and conduct most transactions easily by themselves, including functions like complex searches and automatic payment triggers that no banks even offered yet. If people still wanted to speak to a banker, within seconds they could video chat with a live representative. Face-to-face service on-demand with no driving or waiting in line made for a better customer experience than even the best banks could provide.




Just as all credit unions exist to serve a specific community, FICU was built for the Facebook community. Operating as a non-profit leaves little for most credit unions to spend on marketing or customer service, but

FICU’s close relationship with Facebook lets it stretch its dollars further. Conducting business purely online not only saves on real estate, equipment, payroll, security, insurance, printing, postage, and telecom, but also lets FICU advertise to prospective members and communicate with current customers efficiently.

Like other credit unions, FICU is democratically controlled by its members. Unlike other credit unions, though, shareholder meetings are conducted via Facebook, so they are more transparent and accessible to customers. Zuckerberg invested most of his personal fortune in FICU (leading to it becoming affectionately known as “The Zuckerbank”) and he remains its largest customer today. However, he is the first to point out that every new member gets the same voting power that he has.

Illustration: Facebook ad for FICU

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<p><b>anniversary</b> stop by for a n to SD but I i town! ;)</p>	<div style="border: 1px solid #ccc; padding: 5px;"> <p><b>Facebook International Credit Union</b></p> <div style="display: flex; align-items: center;">  <div style="margin-left: 10px;"> <p>Who owns your bank? At FICU, you do. Lower fees and better interest rates than any bank. Start saving today.</p> </div> </div> <p style="margin-top: 5px;">531,973,112 people like FICU.</p> </div>
<div style="border: 1px solid #ccc; height: 40px; width: 100%; margin-bottom: 10px;"></div> <p>played games.</p>	<div style="border: 1px solid #ccc; padding: 5px;"> <p><b>Pre-Owned Nissans</b></p> <div style="display: flex; align-items: center;">  <div style="margin-left: 10px;"> <p>Check out our used car inventory! Rock bottom price &amp; 100,000 mile</p> </div> </div> </div>

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FICU is not without its limitations. For example, since its members have consistently voted to maintain conservative lending guidelines, people with low credit scores or high loan-to-value ratios are unable to get financing from FICU. Also, while individuals can put cash into their accounts at any participating retailer through Facebook *Commerce*,<sup>162</sup> the few businesses that still take in large volumes of bills and coins need a physical bank branch to make their daily deposits. Finally, there are some who still prefer an old-fashioned bank they can visit with representatives they can talk to in person, although as more industries move completely online, these are getting harder to find.

*Badges* had already turned Facebook into a bank of sorts, one where we stored the evidence of our life experience, the sum total of which was harder to replace than the contents of our checking accounts. And we already trusted the Facebook brand in the financial realm, since it felt like we were paying with Facebook whenever we used *Identity* and *Commerce* to access money we kept elsewhere.

While FICU wasn't for everyone, it made sense for many consumers. Some came for the better interest rates, some came for the convenient software interface, but none of those perks are what won over their hearts. Nor are they what sent crowds of young hipsters and retirees alike down to their banks to defiantly withdraw their life savings and close their accounts. Economists called this mass migration a market correction, while political scientists said it was a citizens' revolt, an expression of public outrage over the banking industry's misdeeds that had gone unpunished. Either way, the collective decision of millions of people to switch to FICU limited the power of the banks that had been exploiting customers and taxpayers for years.

On the other hand, FICU's non-profit structure and notion of customer ownership revived the concept of a bank as an institution that existed to benefit a large community, not a tiny group of corporate fat cats. And FICU's poster boy, despite his riches, was no stereotypical fat cat. Zuckerberg, who at 34 still wore hoodies to press conferences and constantly promoted openness, sometimes to a fault, was one of the only billionaires people felt they could trust to look out for their best interests. His casual manner made him relatable, his track record made him respectable, and staking so much of his wealth in a non-profit convinced many others to do the same.

Indeed, over the last two decades, hundreds of millions of individuals and small businesses around the globe have joined, making FICU not just the world's largest virtual banking service provider, but the world's largest financial institution, period. And while FICU does not profit Facebook directly, it is a vital part of the Facebook ecosystem of services that have benefited the company and our entire society so much over the years.

## BETTER LIVING THROUGH BADGES

The success of FICU gave rise to other conservative credit unions, which have together helped to stabilize the global economy. Because of Facebook, banks have had to change their ways to survive. They now offer more to customers, pay smaller salaries, and take fewer irresponsible risks, since they are no longer considered “too big to fail” and they know the taxpayers will not bail them out again. However, this is just a fraction of the ways Facebook has improved the world in the last 36 years.

For instance, we now waste less money and natural resources on objects that have little utility other than to collect dust. *Commerce* did away with paper receipts, *Identity* replaced plastic swipe cards, and *Badges* has taken the place of truckloads of items like trophies, plaques, stickers, pins, patches, medals, ribbons, diplomas, certificates, letters of appreciation, gift cards, and thank-you cards, to name a few. Data has proven to be more useful, convenient, inexpensive, and durable, and eliminating wasteful objects has helped many companies to become greener and more profitable at the same time.

These efficiencies have saved us time and made our lives more enjoyable. As businesses and government offices started using tablet computers instead of paper forms to collect information, *Identity* was there to fill in most of the blanks automatically. Similarly, Brunswick Corporation let bowlers log in to its scoring computers with *Identity*, which not only entered players’ names and awarded badges instantly, but also stored their lifetime stats and even added their photos to animations that played after each frame. Instead of asking people to sign petitions or join mailing lists, activists at malls and grocery stores started

asking people to wave their *Identity* keys to “like” the causes they supported.

Facebook’s advances have helped in more serious ways, too. For example, *Identity* has given us an easy way to store copies of our medical records. In the past, we either relied on our own memories or else we crossed our fingers and hoped that every hospital, emergency room, and specialist we had seen in our lives would communicate with each other. Neither of these strategies worked very well. Today we can give doctors our complete medical histories, leading to fewer unnecessary tests and preventable mistakes, a change that has saved an estimated \$130 billion and nearly 200,000 lives in the United States alone.<sup>163</sup> We can also store details about allergies, medications, injuries, and other conditions in the “Medical Info” section of *Identity*, which doctors and paramedics can access in an emergency. This gives anyone an expanded version of a medical alert bracelet, and for over 20 years the American Medical Association has encouraged adults to do this for themselves, their children, and elderly parents.

In fact, most industrialized countries now use *Identity* for personal identification and recordkeeping. It is important to recognize that this system was not forced upon us by a draconian government to monitor and control our behavior. Sure, we huffed and puffed about privacy when nothing was on the line, but when it came down to it, we gave up our secrecy for coupons, and we were happy with the trade.<sup>164</sup> Despite the dystopian predictions of past doomsayers, widespread use of personalized microchips did not plunge the world into an Orwellian nightmare.

Rather, our lives simply became a little more convenient and our identities a little more secure.

Future generations will probably chuckle at the ways we used to do things before Facebook, but to be fair, most of these changes were inevitable. We were already on a trajectory to digitize everything we could. Countless others had already tried to tackle these problems in the past. Facebook happened to be in the right place at the right time in history to make its solutions work. But if these had not succeeded, another similar idea soon would have.

What is most profound is not the way that Facebook improved technology, but rather the way it improved us, changing our society permanently and for the better. Back in 2012, psychologists were worried that Facebook was harmful,<sup>165</sup> turning us into lonely narcissists who did not know how to function in the real world. However, through the addition of some simple features, Facebook advanced our society in ways that extended far beyond the scope of social networking.

## **FACEBOOK HELPED CHARITIES DO MORE GOOD**

First, Facebook revolutionized the way non-profits work.

Right from the start, *Badges* gave them a new way to show appreciation to their supporters. Badges were cheaper than a tchotchke and lasted longer than a “thank you,” and were perceived as more valuable than either. Plus, badges provided an easy way to identify and reward a group’s most dedicated members. Many non-profits even turned badges into products themselves. The Girl Scouts of the USA, for example, offers the *I Support the Girl Scouts* badge as an optional upsell while taking cookie orders. For the same cost as another box of Thin Mints, donors get a badge they

can display on their Facebook profiles for a year. This badge instantly became a significant source of funding, and today it brings in as much revenue as the fourth most popular cookie variety. Since it has no material cost, though, all of the money goes straight to the Girl Scouts.

More important, Facebook helped non-profits manage their operations more effectively. Even in the 2010s, charitable groups were still notorious for being disorganized. This would not have been as large of an issue if they collaborated on Facebook, but hardly anyone really participated in charitable activities through social networking. One of the many groups to try to change this was *Causes*, an online philanthropic network that was co-founded by Facebook's first president, Sean Parker, and was heavily integrated with Facebook.<sup>166</sup> *Causes* was impressive, yet in the five years before *Badges* was released, it had still only raised less than a nickel per Facebook user in donations.<sup>167</sup> Even though it was one of the best options available and was free to use, many charities still found *Causes* wasn't worth their time.<sup>168</sup> Despite their best efforts, most groups had a devil of a time just getting supporters to hit the "Like" button, let alone interact in a more meaningful way.

*Badges* helped fix the problem by finally providing an incentive that convinced people to connect with non-profits on Facebook. Just getting all their supporters in one place helped immensely. Not only did this encourage discussion, which strengthened the bonds between volunteers and made the entire experience more rewarding, it also let organizations put the power of Facebook to better use. The site already let them register members, coordinate events, conduct online discussions,



share photos and videos, and distribute news. After helping them bring their audience together, Facebook's basic features took care of most organizations' communication needs.

Even better, when Facebook released *Motivate*, they gave these groups a host of powerful tools designed to help them engage their supporters and get the most out of their time. Furthermore, the more they used Facebook, the more their causes were rewarded. When Facebook introduced its revenue-sharing program in 2014, it let companies take a small cut of the proceeds from advertising delivered on their Facebook pages, which gave them an incentive to direct their audiences to Facebook over other social media applications. In addition, they received a small bonus if they took their share in the form of credit toward placing their own Facebook ads. Verified non-profits that took this route, on the other hand, got an enormous bonus that effectively tripled the value of their traffic. Even though the net impact to Facebook was negligible,<sup>169</sup> this gave charitable causes much-needed promotion that they otherwise could not have afforded.

Free promotion and organizational tools were welcome blessings, since charities have always had to keep operating costs low. Small non-profits generally had small budgets, and larger ones had to maintain favorable fundraising efficiency and administrative expense ratios. (Although imperfect measures,<sup>170</sup> these were some of the most frequently examined statistics when evaluating charities.) This meant that many of the most effective business strategies were too expensive for non-profits to use. *Motivate*, though, made it easy for anyone to execute complex initiatives – such as crowdsourced projects,

distributed grassroots marketing campaigns, and multi-stage fundraising programs – all at no charge. By providing this technology, Facebook empowered even the smallest groups to use sophisticated tactics that previously only the most well-funded charities could afford.

## **LOYALTY PROGRAMS**

This included one of most effective forms of modern marketing: loyalty programs. In general, these are the ways companies systematically reward customers for repeat business. They started with trading stamps, Betty Crocker boxtops, and the humble barber shop punch card, and later evolved into frequent flyer miles, supermarket discount clubs, and complicated credit card reward point schemes.

Loyalty programs work so well because they tap into some of our brains' most powerful psychological triggers, like loss aversion.<sup>171</sup> Since the programs offer benefits and cost nothing, there is no apparent downside and we don't hesitate to join.<sup>172</sup> After we have earned a few points, though, we really, really don't want to give them up.<sup>173</sup>

As human beings, we hate losing anything. We will go out of our way to avoid the feeling of loss, and under many circumstances this leads us to make irrational decisions.<sup>174</sup> Individually, we think we are too smart to act this way, but we all do it.<sup>175</sup> And when we need just a few more points to get the next perk, we will go out of our way to make sure the points we already have earned don't go to waste.<sup>176</sup>

Loyalty programs kept us coming back again and again, even when we otherwise wouldn't, and we loved them for it. There was no rule saying they could only promote buying things, though. They could also be used to reward donations and volunteer work. However, designing and

managing loyalty programs was both difficult and expensive – so much so that even the world’s largest corporations had a hard time making them profitable.<sup>177</sup>

Enter Facebook *Motivate*: A one-stop shop that let anyone create desirable badges as well as state-of-the-art reward programs and achievement systems, all for free. This helped the business world too, but it was not as transformational as it was for non-profits. Retailers already had loyalty programs; *Motivate* just made them better and cheaper. For charitable organizations, though, Facebook changed the game entirely.

### **CHARITY-FLAVORED COFFEE**

Over the years, businesses have used a variety of marketing strategies to align themselves with charitable organizations. The most popular technique used to be “cause marketing,” by which companies typically donated a portion of profits. Starting in 2008, for example, when customers bought certain products during the holiday season at Starbucks, five cents went to The Global Fund.<sup>178</sup> All those nickels added up, and over the next three years, the company donated almost \$10 million in order to help save lives in Africa.<sup>179</sup> Cause marketing campaigns like this gained popularity in the 1980s, and by the 2010s, store shelves were filled with products that triggered a small donation when purchased.<sup>180</sup>

Some watchdog organizations cried foul, saying these programs exploited causes to boost profits or distract customers from a company’s less savory business practices.<sup>181</sup> While the actual motives behind them were not necessarily unethical, it was no secret that these

programs were more about good branding than good deeds.<sup>182</sup>

This was nothing new, though. Before cause marketing, sponsorships were all the rage. Companies that sponsored the Olympic Games routinely spent many times more money advertising that they were an official sponsor than they paid to become a sponsor in the first place.<sup>183</sup> Some suggested that if businesses actually cared, they would skip the promotion and just donate all that money directly, but this was naïve. After all, if a company gave its entire advertising budget to charity, it wouldn't be in business very long. Companies had to spend money to generate publicity, so if they did it in a way that gave some to charity, that could only be a good thing, right?

Actually, no. Evidence showed that cause marketing was bad for society and could actually hurt the causes they were supposed to help,<sup>184</sup> and the explanation revolved around our basic human needs and motivations.

On a neurological level, donating to charity gives us a pleasurable feeling.<sup>185</sup> However, since there is a cost attached, we don't give at every opportunity. In general, we give enough so that we feel like we are good people. While the exact ratio varies between individuals, a certain amount of altruistic behavior feels right to each of us, and when we feel we have given too much or too little, we seek to restore that balance. For example, sometimes we act generously to alleviate our guilt for being greedy in the past, but the reverse is true as well – when we do a good deed, we give ourselves permission to be selfish later.<sup>186</sup>

This is why cause marketing could actually do harm.<sup>187</sup> Buying cause-related products made us feel like we had

done a good deed, when in reality, all we had done was go shopping.<sup>188</sup> If buying our groceries satisfied our need to feel charitable, then when an opportunity to do some actual good arose later, we were more likely to turn it down because we thought we had already done enough.<sup>189</sup>

The long-term effects were even worse. By giving young people that good feeling for doing nothing, cause marketing cheapened charity, turning it into a product feature instead of something that people did for each other.<sup>190</sup> For the generation that grew up with this trend, cause marketing taught them that charity was something that cost nothing and required no effort. One study of teenage and young adult Millennials (born between 1980 and 2000) found that about nine out of ten were likely to switch to a brand because it supported a cause, but only if the product were essentially identical to what they would have gotten otherwise, that is, only if they did not have to sacrifice anything.<sup>191</sup> Millennials were already insufferably self-involved and entitled compared to older generations.<sup>192</sup> Then, when the time came to help out, they felt that they had already done their part because they had chosen the right brand of soda.

## **AFFINITY MARKETING 2.0**

Fortunately, cause marketing fell out of favor and is no longer nearly as popular as it used to be, and another, more effective type of marketing has taken its place. Affinity marketing is a technique whereby a company caters to customers who are affiliated with a certain group by giving them special treatment. Far from new, the concept is almost as old as commerce itself. Merchants in ancient Greece used to give discounts to retired soldiers, and thousands of years later, auto insurance providers offered

lower rates to members of certain trade unions. Long before *Badges* ever existed, some businesses had already used affinity marketing strategies to reward people for doing good deeds. For example, through the “Give a Pint, Get a Pound” program, Dunkin’ Donuts gave free coffee to volunteers who donated blood to the American Red Cross.<sup>193</sup>

Affinity programs like this are superior to cause marketing because they can actually change our behavior. After all, the idea of a few cents being donated to someone else is not very persuasive. It was enough to occasionally convince us to choose a different brand of product we already planned to buy, but comparing minor feature differences is just a normal part of shopping. Affinity marketing, on the other hand, gives us tangible rewards that we can enjoy ourselves, which is enough of an incentive to get us to try new things. This effect is twofold: These special offers can get us to sample products and services we might otherwise not have tried, but only in return for performing actions that we might otherwise not have done.

For instance, it is unlikely that even a single individual was convinced to try Starbucks coffee because a nickel would be sent to Africa. On the other hand, some people had never tasted Dunkin’ Donuts coffee, and others had never given blood. But because of the “Give a Pint, Get a Pound” program, many were convinced to try one, or both, for the first time.

Affinity marketing programs like this were mutually beneficial arrangements: Charities got additional donations and volunteers while businesses got new potential customers (as well as a public relations boost for helping a good cause). Even better, these leads were more

qualified than those generated through other methods. Businesses already gave away samples to find new customers, but lots of people took them only because they were free, not because they were actually interested. On the other hand, anyone convinced to give blood by the Dunkin' Donuts offer was likely a coffee drinker. (For that matter, they probably also intended to give blood at some point, but just needed a little incentive to push them to stop putting it off.) Plus, regardless of their motivations, these people ended up with a better impression of the coffee than if they had bought it or been given it for free, because as human beings, we value products that we have to work for far more than those that require no money or effort.<sup>194</sup> Finally, volunteers came away from these experiences with the positive feeling that comes from truly helping others, which was associated not just with the charities they helped, but also the corporations that rewarded them for doing so.

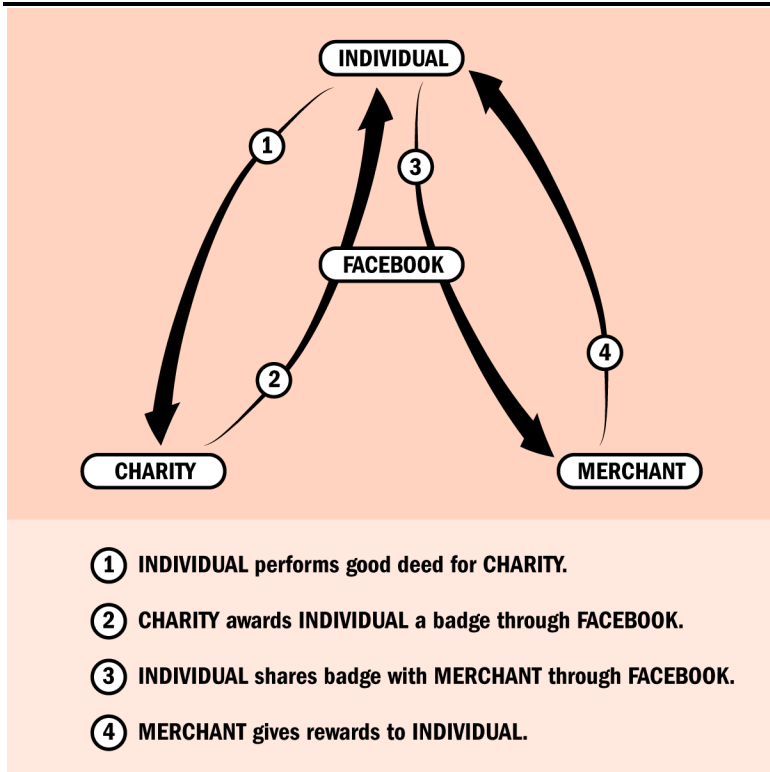
Affinity marketing provided far superior results, but before *Badges* and *Motivate*, overhead costs were so high that this didn't happen very often. It just wasn't feasible to work with a small non-profit or local business, so agreements typically existed only between the largest corporations and charities. Even then, partnerships were still rare, as administrative and legal expenses could easily outweigh any potential benefits.

Facebook eliminated this problem with their "frictionless affinity marketing" model. Once charities were able to systematically identify who had helped them, it became easy for businesses to reward these do-gooders. Using *Badges* as an intermediary makes these arrangements a snap, because no official partnerships are necessary. In

fact, charities and businesses don't even have to interact with each other at all.

For example, The Home Depot offers discounts to people who have helped build houses with Habitat for Humanity. This arrangement would have been prohibitively expensive years ago, but thanks to *Badges* it requires barely any effort. It takes Habitat for Humanity just a moment to award a badge, and the discounts at The Home Depot are given automatically when customers swipe their *Identity* keys. As the following illustration shows, *Badges* makes everything work smoothly without any interaction between The Home Depot and Habitat for Humanity:

Illustration: Facebook's frictionless affinity marketing model





Enabling complex partnerships to be formed with no legal agreements and minimal management expenses caused a seismic shift. Today, instead of only huge corporations forming partnerships with the largest non-profits, companies of all sizes can easily align themselves with any charitable cause, local or international. Now even the tiniest businesses take advantage of affinity marketing strategies because Facebook lets them easily identify which customers should receive special treatment.

If you adopt a pet from your neighborhood shelter, for example, the badge that comes with it will get you a free checkup at thousands of independent veterinarians across the nation. Regional businesses can use similar strategies to show support for their communities. For instance, at any of their locations throughout Illinois, Indiana, and Wisconsin, the famous Chicago pizzeria Gino's East gives free delivery and breadsticks to customers who have earned the *Education Superstar* badge by volunteering at area schools.

Facebook also helps local businesses support national and international efforts. Many vendors at organic farmers' markets, for example, give discounts to people with the *Rainbow Warrior* badge from Greenpeace. Likewise, serving in the armed forces gets you the retail version of a hero's welcome, with benefits for life at small companies owned by fellow veterans around the world. And if you donate blood, now you get more than juice and cookies, or even coffee. You get a whole treasure trove of perks, like a free pass to a night club or a free bucket of balls at a driving range. In fact, it would take you a week to cash in on every benefit offered by all the local bakeries, hair salons, and

sushi restaurants that support the Red Cross in a typical American town.

Through Facebook, even a tiny business can create a promotion that helps people on the other side of the world. At her family's restaurant in Baltimore's busy financial district, Melat Habtamu serves cuisine from her parents' native country of Ethiopia. Here she tells how her family uses *Badges* to help the people there:

*My mom used to put out a collection box for a group called Ethiopia Reads, but everyone ignored it. I don't blame them. How did they know I wouldn't keep the money for myself? Besides, illiteracy just doesn't sound like a big problem. When people think of Ethiopia, they think of hungry children, but it's hard to fix that or anything else when most people there can't even read.<sup>195</sup> We gave what we could, but I felt helpless. I'm 7,000 miles away. What more can I do? Then my daughter took away the box and put up a sign that says, "Get free drinks for life when you donate \$20" and it has a symbol you can scan with your phone to bring you right to where you can donate.*

*Now, the people who come in here are mostly bankers. You can see the wheels turn in their heads as they amortize their "investment" over ten lunches. Lots of them go for it.*

*We had that collection box out for years and only got maybe 40 dollars, tops. I've lost count now, but hundreds of people have donated right from our restaurant. Do you know how much that helps over there? It changes lives! What does it cost me, some tea and lemonade?*

*Actually, and I swear my intentions were pure when I started this, but we even come out ahead, because after people get the badge, they come in a lot more often.*

It works the other way around, too. Huge, multinational corporations can use Facebook to help local non-profit organizations by rewarding the people who support them. Most affiliate themselves with causes that complement their core business. The Sports Authority, for example, gives a discount at any of its nationwide stores to people who have coached a youth sports team in the last two years. Amazon offers a similar deal to customers who have earned badges for reading to the blind. Along those lines, volunteers who deliver meals to seniors or drive them to medical appointments pay less for gasoline at 7-Eleven.

Other companies aim to help solve social problems related to their industries. For instance, McDonald's gives a free meal to those who earn badges from any of thousands of community litter cleanup groups. Several major banks waive fees for customers who volunteer at soup kitchens, food banks, and homeless shelters. And for members of local designated driver programs, drinks are on the house at their neighborhood Applebee's (non-alcoholic, of course).

### **REWARDS INTO PLOWSHARES**

*Badges* has the power to bond people together based on their common interests. Every badge essentially forms a worldwide club, complete with membership requirements (only those with the badge are admitted), seniority (based on when badges are earned), and ranks (higher for those with more advanced badges). Due to the versatility of *Motivate*, these groups can be directed toward charitable endeavors even when they were formed for completely non-charitable reasons. In fact, some of the largest volunteer efforts have evolved out of successful marketing campaigns.

By combining data about purchases, social interactions, and both online and offline activity, companies are able to create sophisticated promotions that foster mutually beneficial relationships with their most loyal customers. Some of these efforts are simple. For instance, many companies reward fans when their friends buy products they recommend on Facebook – programs like these essentially turn each of their customers into an affiliate marketing partner.<sup>196</sup> But others have created much deeper connections.

When Adam Silver became the commissioner of the NBA in 2017, one of his first initiatives was the “Prove It” campaign, which aimed to separate the fans from the superfans. Participants earned points through a wide variety of actions, including online behavior (like promoting games on Facebook, participating in sports discussion forums, or playing NBA video games), offline behavior (like attending games or playing basketball through a school or club), and purchase behavior (like buying NBA merchandise, subscribing to the *NBA League Pass* sports package, or even just patronizing restaurants that subscribed to it). While the various badges they earned were their own reward for many fans, the points could also be redeemed for perks. Before *Badges*, such a broad loyalty program would have been prohibitively expensive, if not impossible, but Facebook’s suite of applications made it simple and cost-effective.

Two years later, the campaign went further, asking fans to prove their love of the sport by helping with local after-school leagues or basketball camps. In addition to massive amounts of points, those who volunteered received special deals on game tickets and limited edition merchandise not

available elsewhere, as well as chances to win courtside seats, meet their favorite players, or even get a few seconds of fame on ESPN. At the end of the 2019-20 NBA season, Commissioner Silver shared why Facebook was his favorite marketing vehicle:<sup>197</sup>

*We had a very specific message, and because [Facebook] can target so well, we didn't have to waste money barking up the wrong trees. We got to talk right to our biggest fans.*

*We made our ad buy outlay several times over in marginal revenue, and that's just good business.*

*But we also got ten times what we spent in volunteer work. We got kids off the couch, off the streets, and onto the court. We got two generations more excited about basketball. This started out as just a promo, but we changed lives.*

*I love it. I can barely believe I made that happen. I mean, of course it was the fans and the players who did all the work, but I made the decision. I wrote the check. It's an almost addicting sense of power to be able to do that much good that easily. I cannot wait to see what we can do next season.*

Facing a steady decline in youth baseball,<sup>198</sup> the MLB followed a similar strategy the next year. These programs continue to flourish today and improve profitability, but as a side benefit, sports fans now act like members of loosely organized service organizations. All the old rivalries are still there, but *Badges* has given fans a socially beneficial way to express their loyalty. Last year, Yankees fans competed against Red Sox fans to see which group could get more new and used sporting equipment donated to underfunded public schools.

*Badges, Motivate, Identity, and Commerce* have made it so easy to set up beneficial programs that they are everywhere you look. In fact, so many different groups are interconnected now that it's easy to forget that Facebook's system is the glue that holds them all together. The social networking giant has become the universal conduit for all manners of partnerships, from those that exist purely for profit to completely charitable purposes, and everything in between.

Facebook has changed so many aspects of our day-to-day lives, but that's not the best measure of how much good it has done. Forget how Facebook has let you communicate with your friends and family; forget how *Identity* has made your life more convenient; forget how using *Badges* has helped you achieve your goals. Statistically, there's even a decent chance you met your spouse on Facebook, but for a moment, try to forget everything Facebook has done for you personally. To visualize the full magnitude of how much Facebook has improved the world, consider this:

By helping them run their operations better and creating new ways to motivate and reward their supporters, Facebook has helped charitable groups do even more good. How much more? Formal studies of large non-profits have concluded that by increasing participation, revenue, and spending efficiency, Facebook has led to improvements of a third or more. It has had an even bigger impact on smaller charities, where some estimate that *Motivate* has multiplied their effectiveness by several times, while others say that without Facebook, their group wouldn't even exist.

Practically every charity in the world today uses Facebook. For the sake of argument, let's say that Facebook helped these charities to do just 10 percent more. Try to imagine

what 10 percent of all the good deeds performed by all the charitable organizations in the world over the past 20 years looks like, and you will start to see just how much impact Mark Zuckerberg made by deciding to use his greatest strengths to improve the world around him.

## **FACEBOOK HELPED US BECOME BETTER PEOPLE**

Beyond helping charities do more good, Facebook also helped us become better people. This surprised many of us, because for all the ways the internet made our lives better, it also seemed to make our personalities worse, at least at first. In the beginning, the internet was constantly compared to the lawless Wild West.<sup>199</sup> It was a good metaphor: We could do almost anything we wanted online and get away with it. This complete lack of consequences combined with the anonymous nature of the internet brought out the worst in many of us.<sup>200</sup> We cheated,<sup>201</sup> we stole,<sup>202</sup> and we said awful things that we would never say in person.<sup>203</sup>

More than anything else, though, we lied.

## **THE TANGLED WEB WE WOVE**

People have always lied, of course, but the internet brought deception to new heights.<sup>204</sup> A cartoon in a 1993 issue of *The New Yorker* depicted a canine at a computer saying, “On the Internet, nobody knows you’re a dog.”<sup>205</sup> For the next two decades, this was all but true.

As the world moved online, we turned to the internet to get information about prospective mates, job applicants, and political candidates. These people could make any claims they could dream up, but unfortunately, there was no easy way to tell if the things they said were true. The source of

information we increasingly relied upon to make important decisions about people was not very trustworthy.

In the 2010s, dishonesty was routine when seeking a job: Most people lied about their work history or education on their résumés.<sup>206</sup> Dozens of online companies sold very convincing fake degrees, while those who were proficient with Adobe *Photoshop* could just make their own for free. A glowing reference from a former “employer” required nothing more than a cooperative friend and a mobile phone.

These fabrications went largely undetected. Jobs sometimes had hundreds of applicants, so it was impossible for human resources departments to check every detail. Some lies were not discovered until after people had become the leaders of Fortune 500 companies. The CEO of a major tech firm was fired after just four months when it became public that he did not have the degree in computer science that he had claimed.<sup>207</sup> The CEO of another company listed two false degrees on his résumé, a lie that was only caught after he called attention to himself by getting arrested for driving while intoxicated... for the third time.<sup>208</sup> Even when they lost their jobs for bending the truth, though, people felt they had done nothing wrong, that lying was necessary to compete because everyone did it.<sup>209</sup>

The lies about jobs grew even wilder on dating websites, where the temptation to appear more interesting or exotic was irresistible.<sup>210</sup> Many simply emulated what they saw on television. In 2009, over a thousand young women on one dating site alone listed their occupation as “forensic anthropologist,” an obscure profession glamorized by Dr. Temperance Brennan, a fictional character played by Emily



Deschanel in the popular TV show *Bones*. The American Board of Forensic Anthropology, though, had only certified about two dozen women in the past three decades.<sup>211</sup> To impress potential mates, even more men pretended to be like Brennan's partner Seeley Booth, an FBI special agent and former Army Ranger portrayed by actor David Boreanaz.<sup>212</sup> Claiming to be an elite soldier was a common lie. According to an actual FBI special agent – one tasked with investigating military imposters – out of every 300 men who claimed to be Navy SEALs, 299 were frauds.<sup>213</sup>

The dangers of this misinformation reached far beyond discovering that a date was not the champion-racecar-driver-turned-captain-of-industry he claimed to be. Some people conned their way into some very important jobs. For ten years at MIT, one of the most prestigious universities in the world, the dean of admissions, that is, the person in charge of the very department that checks applicants' qualifications, was someone who had made up her own academic credentials.<sup>214</sup>

Even worse lies put people in positions where they could hurt themselves or others. On Craigslist, handymen posed as licensed contractors and babysitters falsely claimed to have first aid training. Firefighters used fake degrees to get promotions within the Fire Department of New York.<sup>215</sup> The martial arts industry was completely unregulated. Anyone could make up a backstory, declare themselves a master, then set up shop convincing others they were capable of defending themselves in a life-threatening situation.<sup>216</sup> Unsurprisingly, injuries were common.<sup>217</sup>

It got even worse. After it was discovered that the deputy CIO of the US Homeland Security Department had bought all of her degrees online from a "university" that turned out

to be an old motel,<sup>218</sup> the US Government Accountability Office found that hundreds of people at high-level government positions, mostly in the Department of Defense, had purchased their credentials from similar diploma mills. This included managers at the National Nuclear Security Administration who had operations responsibilities and security clearances.<sup>219</sup>

## **BADGES TO THE RESCUE**

The internet was a mess of misinformation, but Facebook helped clean it up. It's not as if Mark Zuckerberg did this all by himself. There were already thousands of trustworthy institutions in the world; Facebook just made it easy to get data from them.

*Badges* proved to be a simple, consistent way to verify almost any piece of information. In the very beginning, badges were new and exciting, but the novelty wore off very quickly. After that, they became expected. We got badges automatically for just about everything we did. If someone claimed she was a certified massage therapist, why wouldn't she have the badges to prove it unless she were stretching the truth?

Almost overnight, *Badges* created a new standard of credibility for personal information that had never existed before. No longer could jobseekers reinvent themselves for each new application. No longer could people adopt a new persona to impress a date. No longer could politicians rewrite their life stories to match current opinion polls.

In addition to exposing outright lies, *Badges* shined much needed light on gray areas. For example, the academic badge collection of a dedicated student looks very different from that of another who barely passed, even if they both

have the same diploma. And a quick look at the activity badges of a guy who says he is “outdoorsy” on his dating profile will quickly let someone know if that means he takes a short hike once a year or that he braves Class VI rapids in a kayak every weekend.

Facebook also helped solve much larger issues. Years ago, unscrupulous medical practices scammed billions of dollars out of Medicare each year by charging for procedures on patients who did not receive them, or who didn't even exist.<sup>220</sup> Convicted sex offenders lied about their backgrounds to get hired at schools where they could abuse more children.<sup>221</sup> Even without fraudulent intent, a lack of good personal information could be harmful. Patients died in emergency rooms because doctors didn't know their medical history or which drugs they were allergic to. With Facebook, these types of problems largely went away with the wave of an *Identity* key.

Again, this kind of progress was probably inevitable. Improvements in technology made crucial information available in ways that prevented bad things from happening. Whether the solution we adopted came from Facebook, or another company, or the government, at some point a better personal identity system would have come along to prevent accidents and make it harder for people to lie or break the law.

Making a handful of people involuntarily commit fewer bad deeds benefited everyone, but it was not exactly social progress. The more remarkable change was how Facebook made so many of us voluntarily want to do more good.

## MAKING OUR DREAMS COME TRUE

Despite the overbearing amount of untruth that used to exist on the internet, it was not as though we were a world of pathological liars.<sup>222</sup> In a better light, we were a world of wishful thinkers.<sup>223</sup>

The carefree nature of the internet allowed us to create online versions of ourselves that represented how we wanted to be, or at the very least, how we wanted others to see us.<sup>224</sup> With *Badges*, though, Facebook provided an unprecedentedly clear view of what we had accomplished in our lives. Our education, our professional achievements, our volunteer work, our hobbies – there were badges for everything we did. This turned the blurry self-portraits we had painted into detailed photographs, and many of us were not thrilled with how we looked. We discovered that the internet had not just made it easy to lie to other people; it had also made it easy to lie to ourselves.

As human beings, it is natural, even healthy, to have high opinions of ourselves.<sup>225</sup> As a result, most of us think we are better than average. Now, it is mathematically impossible for this to be true, of course, since only half of any group can be above-average, but few people think of themselves as below-average. In one study, 94 percent of college professors rated themselves as above-average teachers.<sup>226</sup> In another, only 6 percent of students rated themselves as below-average in leadership ability.<sup>227</sup> This type of thinking extends to every aspect of our personalities, and most of us feel we are smarter, healthier, more ethical, more interesting, and more attractive than the average person.<sup>228</sup>

In the past, this included thinking we were also more charitable, and not because we thought too little of others, but rather because we thought too much of ourselves.<sup>229</sup> Part of this was because we knew about every charitable act we performed but were not aware of what others did, although that was not the only contributing factor.<sup>230</sup> We also knew about our own good intentions, and the perfectly justifiable reasons we fell short of them, and gave ourselves credit for those too.<sup>231</sup> Only when someone made us evaluate our actual behavior objectively did we not think so highly of ourselves.<sup>232</sup>

We had been using Facebook for years to preach how important it was to find a cure for breast cancer, or improve the education system for our children, or help the victims of the latest natural disaster. Yet when *Badges* showed us an accurate account of just how much – or, in many cases, just how little – we had actually done to further those causes, our soapboxes started to feel a little rickety.

We weren't just falling short when it came to helping others, though. We were failing ourselves. We read about a 100-year-old man who ran a marathon,<sup>233</sup> and we swore to ourselves that we would finish one, too, but with each day that passed, we were further from being in good enough shape to do it. We weren't restoring that old boat or finishing that novel like we had always talked about. We weren't learning to salsa dance, or play the piano, or scuba dive, or speak Italian. We weren't traveling with our families to see the amazing wonders this world has to offer. We put up a good front, but we were ignoring the most cherished aspects of our lives while we watched more television than we had ever realized.

Facebook dragged us into reality, forcing us to reconcile the discrepancies between what we thought we were like and who we actually were.<sup>234</sup> There was no quick fix. We could not keep fooling ourselves or anyone else with empty talk. On Facebook, we had to build our identities through meaningful action.<sup>235</sup>

A few of us gave up our fantasy versions of ourselves and quietly toned down our inflated egos. But many, many more of us rose to the challenge and worked to become the people we had always intended to be.<sup>236</sup> The badges on our Facebook Timelines were the stories of our lives, and we would be damned if we left any chapters uninteresting.

Fortunately, *Badges* did not just point out our shortcomings. On the contrary, it was designed specifically to help us overcome them. Decades of research have identified the best ways for people to accomplish their goals.<sup>237</sup> These techniques are remarkably effective, but most people find them difficult to put into practice. With that in mind, Facebook designed *Badges* around the methods that help people succeed in their lives. In fact, the application's most basic features reinforce an array of goal-oriented habits proven to aid in self-improvement.

To begin, *Badges* helped us choose good goals. When we choose goals that are unrealistic, we become discouraged; when we choose goals that are too easy, we don't take them seriously.<sup>238</sup> By showing us the accomplishments of our peers and the people in our lives whom we admired, *Badges* helped us set our sights on the right targets.

Once a goal is selected, three of the best ways to increase the chances of reaching it are to break down large objectives into a series of approachable tasks, to measure

and quantify progress, and to reward gradual change.<sup>239</sup> *Badges* did all of that for us. Major goals were represented by valuable badges at the end of achievement paths, which served as blueprints for attaining them. Each step along the way consisted of smaller badges with clear requirements for earning them, making it easy to see how far we had come and what to do next. This helped us visualize the process of working toward ambitious goals, which was vital to actually fulfilling them.<sup>240</sup>

Experts also advise writing goals down, looking at them often, and sharing them with friends and family. Merely adding a badge to our “Lifetime Goals” list accomplished all three of these actions at once. When we set a date by which we intended to earn a badge, Facebook intelligently assigned deadlines to every intermediate badge that led up to it, and taking the first step moved our ultimate goal into our “In Progress” list. *Badges* put our life’s goals right where we and everyone else would see them every day. No longer could days, weeks, or even years go by without us noticing if we’d made any progress. Facebook also showed us who else in our social network had already earned or was working toward the same badges, effortlessly forming a support system to help us achieve our goals.<sup>241</sup>

### **LIVING OUT IN THE OPEN**

Ultimately, sharing our collections of badges with our social networks like this led to a form of positive peer pressure that encouraged activities that we valued as a society.<sup>242</sup> One of the best examples of this phenomenon occurred in the months leading up to the 2016 United States presidential election. That year, the US government introduced the *I Voted* badge, a modern version of the stickers commonly given out at the polls on Election Day.

Technically, earning the badge only required people to register for an absentee ballot or visit a polling station, not actually vote,<sup>243</sup> but it was a vast improvement over previous years, when anyone could add an “I Voted” banner to their Facebook page with a single click without leaving their home.<sup>244</sup>

Controversial conservative talk radio host Rush Limbaugh called attention to the *I Voted* badge during one of his broadcasts:

*I'll tell you what I like best about this. After the election, when you hear one of these... these imbeciles, one of these liberal idiots who want your tax dollars to pay for everything – maybe one of your coworkers, it could be someone on the news, maybe one of these communist nutjobs in Hollywood – the next time you hear them running their mouths, I want you to look at their Facebook pages. Look at their badges. Forget about the tree-hugging awards from the drum circle championships... just see if they have the one that really matters. See if they have the one that says they voted.*

*I'm here to tell you folks: It won't be there. And I'll tell you why. These liberal snobs... Now let me make a distinction here. Some liberals are okay. They are just misinformed, so they are on the wrong side of the issues, but other than that, they are fine people. But these liberal elitists are too good to vote! They don't like democracy. They want socialism.*

*You know, it's worse than that. They don't love this country, and they actively hate those of us who do love our country.*

*So when they start crying about how they want more welfare or that the government should pay for their pot, you just cut them off. Cut them right off. You say,*



*“Uh-uh-uh, you had your chance to express your opinion. And you blew it.”*

*If you don't vote, you give up your right to complain. If you don't vote in this country, then your opinion doesn't matter. That goes for everyone. Me, you, everyone listening. I'll say it again: If you do not vote, your opinion does not matter.*

*I'll tell you this: If you don't vote, I don't want to talk to you. Why would I let you take up five minutes of everyone's time on the air, telling us the way things ought to be, if you can't take five minutes of your own time to vote.*

*For the next four years, if you don't have that badge – and we will check – don't bother calling in. This show is for patriots only. Patriots vote. If you have a professed and deep love for your country, prove it. Voting is how citizens participate in democracy. If you're an American, you vote. End of story.*

As had happened frequently in the past, Limbaugh's message spilled beyond his core audience and went viral on the internet, inspiring conservatives and offending liberals. The entertainment industry Limbaugh had criticized, on the other hand, took his words as a challenge and responded in kind. A few days later, actor Alec Baldwin released a video which began with him flaunting a copy of his voting record, which showed that he had voted 26 times in the past 25 years.<sup>245</sup> The camera then panned out to show he was sitting at the living room table in his New York apartment, surrounded by over 50 fellow actors and musicians who declared that they all voted every year and would be doing so again in the upcoming election.

Over the next week, half of Hollywood jumped on the bandwagon, with celebrity after celebrity promising to earn the badge and encouraging their fans to join them.

Heartthrob musician Justin Bieber went a step further, announcing that he would release his latest single in a live webcast the day after the election. The catch: It would be available only to people with the *I Voted* badge, which meant that parents nationwide received daily lectures on the grave importance of voting from their adolescent daughters. The comment Limbaugh made to motivate his conservative base incited action on both sides of the aisle: one half committed to proving him right; the other to proving him wrong.

Patriotic auto dealerships said they would extend their Election Day sales through the entire month of November, but only to customers who earned the badge. Pastors told churchgoers that it was their spiritual duty to make sure everyone in their congregation voted. College professors warned students that failing to vote could have negative consequences later in their careers, especially if they ever went into politics.

Word got around that this easy-to-obtain badge would be used to measure our social responsibility for years to come. Whether out of sincere civic duty or fear of being labeled a freeloader, voters turned out in droves. On Election Day, voter turnout topped 75 percent, a level not seen since the 1800s,<sup>246</sup> and it hasn't gone down since.

### **A NUDGE IN THE RIGHT DIRECTION**

Looking at it the worst way, *Badges* became the first real incarnation of the proverbial “permanent record” that had never been anything more than a bluff from school disciplinarians. It taught us that our actions have consequences that affect us for the rest of our lives, for

better or for worse, and that was a very good lesson to learn.

By using Facebook, we started to live our lives more publicly, and most of us didn't want to be associated with negative behavior. When she was Facebook's marketing director, Randi Zuckerberg said:

*I think anonymity on the Internet has to go away...  
People behave a lot better when they have their real  
names down.<sup>247</sup>*

Now, there are still plenty of legitimate reasons<sup>248</sup> to interact anonymously online, and there are still plenty of places to do so. But Randi was right: We did start behaving better when we saw our names next to what we were doing. For most of us, this has been a positive experience that goes beyond not wanting to get caught misbehaving. We do not just want to avoid bad marks on our records – we also want to fill those records with evidence of rich, meaningful lives.

*Badges* also gave us a clearer view into what others were doing, and in general, people turned out to be better than we had given them credit for. When we saw how many positive actions everyone else was taking, we stopped being so cynical.<sup>249</sup> And when we saw a record of our own actions, and knew that others could see it too, we started making better decisions.

The changes have been remarkable. Obesity rates are down. Post-secondary education is up. Donations and volunteering are at all-time highs. Almost any way you look at our lives, we now spend more time pursuing personal accomplishment and public service than we have in decades.

We are doing a lot more good these days, for ourselves and for each other, but Facebook has not made us do anything we did not already want to do. People do not get in shape just so they can put a new badge on their Facebook page. The same goes for affinity marketing freebies. No one adopts a baby just to earn a badge that saves them 10 percent on children's clothing at Target. These perks are nothing more than a nudge in the right direction.

Mark Zuckerberg deserves some of the credit, but he didn't fundamentally change us. We had always known we should vote, just as we had always known we should donate blood, exercise more often, and spend more quality time with our families. Facebook just helped us become the people we already wanted to be.<sup>250</sup> *Badges* made it easier by showing us exactly how we could improve ourselves and then showering us with incentives at every step along the way.<sup>251</sup>

Businesses small and large deserve some credit, too, for sweetening some of those incentives. Granted, companies have always given away free samples and promotional discounts. Today, they just give out more to people who are more deserving. One marketer calls it "karma enforcement" – a way for the corporate world to make sure kindness finds its way back to people who do good deeds.

Most of the credit, though, goes to us, the ones who did all the work. We had the intention; we had the ability; we just needed a little push. Previously, only a rarefied few unfailingly did what they knew they should, even when it was unseen and thankless, but the rest of us just weren't that saintly. Years of selfish choices had led us to shy away from hard work and altruistic actions, but after our achievements and contributions started being consistently recognized, this changed. The positive reinforcement

gradually conditioned us until eventually, when an opportunity arose to improve ourselves or help others, our kneejerk reaction shifted from “Not right now” to “Sure, why not?”<sup>252</sup>

We may have needed that push to get started, but once we got going, we kept going. We don't expect special treatment for nothing. We expect to have to work to get those perks, and we don't expect to be rewarded for every little thing we do. No, we do so much more now, for ourselves and for others, simply because we learned that doing the right thing feels good.

It turns out Mark Zuckerberg was correct when he said that privacy is no longer a social norm,<sup>253</sup> and this has been a good change overall.<sup>254</sup> Facebook helped us to live our lives a little more publicly and, as a result, hold our heads a little higher. This has gotten us into some very good habits, which, if current trends continue, will carry on long after the latest wave of social networking applications has been forgotten.

Thanks to Facebook, our future looks bright.

## AFTERWORD: HOW BADGES WON THE WAR

In the early 2010s, the social networking market was crowded with dozens of major players, each bent on global supremacy. However, one fact made them all equally vulnerable: Every app at the time offered a nearly identical set of features.

But *Badges* was a truly unique competitive advantage that gave people solid reasons to use Facebook instead of other social networks. By associating photos with badges, people were able to organize them better on Facebook than they could on Flickr. New badges announced accomplishments that required more than typing a short line of text, so they got more attention than Twitter posts. Verified professional achievements made Facebook a more trusted source of résumé information than rival social network LinkedIn.

Although Facebook later went on to create *Identity*, *Commerce*, and FICU, *Badges* is what secured Facebook's destiny. Ultimately, the social web boils down to where we choose to house our identity online, and the public chose Facebook. Today, thousands of third-party badge apps come and go each year, making the Facebook platform the center of the social cloud.

All of its predecessors had been replaced when the “next big thing” came along, but Facebook stopped this cycle of constant turnover, survived the social networking wars, and emerged victorious as the undisputed global leader. And *Badges* was the weapon that made the difference.

## BADGES FIT THE FACEBOOK GENERATION PERFECTLY

When studying populations, sociologists find it useful to categorize people according to when they were born, although they rarely agree on the precise years when these generations start and end.<sup>255</sup> One of the weaknesses of this approach is that it tends to oversimplify. Like astrology, it suggests that a person's birthdate determines his or her personality traits. Plus, it sorts people into even broader groups than a monthly horoscope or a yearly zodiac. Generations are typically about two decades long, so only five or so are alive at any given time. To say that all people born between two arbitrary dates are the same is, of course, a vast overgeneralization. There are not just five types of people, and every generation has its share of cynics and dreamers, heroes and deadbeats, saints and scoundrels.

Generations certainly appear different, though. When we are young, we find it hard to understand the behavior of older people. Later, as we age, at a certain point the latest crop of youngsters seems completely foreign to us. We conclude that our own generation was wildly different when we were their age. More specifically, we think our generation was better. In some ways, all generations hold similar views of each other. As one famous speaker reportedly said:

*The children now love luxury; they have bad manners, contempt for authority; they show disrespect for elders and love chatter in place of exercise. Children are now tyrants, not the servants of their households. They no longer rise when elders enter the room. They contradict their parents, chatter before company, gobble up dainties at the table, cross their legs, and tyrannize their teachers.*

While it sounds like it might have been said in the early 1900s, that quote is commonly attributed to Socrates, some two-and-a-half millennia ago.<sup>256</sup> In fact, much of any “generation gap” sensationalized throughout history can be explained by how our perspectives change as we age, which leads to conflicts between the young and old that have been around as long as humanity itself.<sup>257</sup>

These are known as “life cycle effects,” one of the three major explanations for differences in behavior between age groups. The second are “period” or “environmental effects,” which are universal events, like economic fluctuations and social trends, that affect various age groups differently. Particularly poignant events, like wars and major advances in technology, that occur while people are young can leave a lifelong impression on those who grow up together, which leads to the only true differences between generations, known as “generational” or “cohort effects.”<sup>258</sup>

At their worst, poor generational studies confuse these three types of effects and suggest that two trends that happened at the same time were related, even when no proof exists.<sup>259</sup> They are typically alarmist and predict the downfall of humanity at the hands of the youngest generation, reinforcing popular misconceptions among older people that things really were better in their day. Many of these supposed differences are imaginary, though, as our blurry memories rewrite idealized versions of history in which we tend to forget our shortcomings.<sup>260</sup> Some real differences do exist, though, and at their best, sociologists discover them by making valid comparisons between generations as they pass through the same stages of their lives. After all, we are products of our times, and



we tend to share many characteristics with others who have experienced similar events at similar ages.

Of the people alive in Western society when Facebook was founded,<sup>261</sup> the oldest were the G.I. Generation, later rebranded the Greatest Generation,<sup>262</sup> who grew up during the Great Depression. Next came the Silent Generation. Born during a two-decade gap in history which never produced an American president,<sup>263</sup> this group was largely made up of people who grew up during World War II.

The Baby Boom Generation began with the end of the war and ended with the beginning of the birth control pill. Baby Boomers grew up with Beatlemania, Woodstock, the civil rights movement, and the first moon landing. Later, they enjoyed longer lifespans and the greatest concentration of wealth in history. To Boomers, life looked like it would never stop getting better.<sup>264</sup>

Then came Generation X, who were born in the 1960s and 1970s. During that same period, divorce rates in America doubled to all-time highs<sup>265</sup> and the children paid the price, creating a bumper crop of latchkey kids with low self-esteem.<sup>266</sup> Expressing themselves with ripped clothing and grunge music, the Gen Xers grew to become known as a group of jaded, self-absorbed slackers.<sup>267</sup>

Finally, after Generation X came Generation Y, also known as the Millennial Generation, a catchall name for those born in the 1980s, 1990s, and early 2000s.<sup>268</sup> Millennials were the first to grow up with personal computers and mobile phones, which made their lifestyles dramatically different from those of earlier generations.<sup>269</sup> Instead of baseball,<sup>270</sup> they played video games.<sup>271</sup> Many had never checked a book out from a library; everything they ever

needed to know was online.<sup>272</sup> Even their dangers were digital: They worried about cyberbullying<sup>273</sup> and were warned how texting and driving could be worse than drinking and driving.<sup>274</sup> They weren't jaded, and they weren't slackers, but not to be outdone by the Gen Xers, they nevertheless managed to take self-absorption to new heights.

## RAISED BY HELICOPTERS

Since the dawn of television, each American generation has, during their formative years, watched as a national tragedy unfolded, leaving a permanent mark on their memories and forever changing their worldview. For Baby Boomers, it was the assassination of President John F. Kennedy. For many Gen Xers, it was the *Challenger* space shuttle explosion. The Millennials, though, watched the Columbine High School massacre and the 9/11 terrorist attacks.

Boomers and Gen Xers were warned about the Cold War, but the worst thing to come from it was a huge deficit from military spending. When both of these generations were young, one of their biggest fears was conforming and ending up with a boring life in the suburbs. Millennials, on the other hand, were scared that someone – a complete stranger, or even one of their classmates – might murder them and their friends at any moment, for incomprehensible reasons.<sup>275</sup>

Whereas earlier generations grew up thinking that America was invulnerable, Millennials had their sense of security shattered. Fortunately, their parents were there to comfort them. Compared to previous generations, Millennials got

along very well with their parents and received plenty of attention from them – perhaps too much, in fact.<sup>276</sup>

In their efforts to make the world a less scary place for their children, the parents of Millennials went overboard. They covered their toddlers in protective padding and kept them on short leashes, both metaphorically and some even literally. If their children were allergic to peanuts, instead of packing them lunches or just teaching them what was safe to eat, parents petitioned the school board to ban all nuts for everyone. As Nancy Gibbs wrote in *Time* in 2009:

*The insanity crept up on us slowly; we just wanted what was best for our kids. We bought macrobiotic cupcakes and hypoallergenic socks, hired tutors to correct a 5-year-old's "pencil-holding deficiency," hooked up broadband connections in the treehouse but took down the swing set after the second skinned knee. We hovered over every school, playground and practice field – "helicopter parents," teachers christened us, a phenomenon that spread to parents of all ages, races and regions.<sup>277</sup>*

Not every parent went to these extremes, but the times had certainly changed. When Baby Boomers were young and misbehaved in school, they were likely to receive a spanking at home, or perhaps one from the principal.<sup>278</sup> Gen Xers in the same situation may have received a stern lecture about the importance of education, if they were lucky enough to have parents who were paying attention.<sup>279</sup> When Millennials acted out, though, they were not scolded, because that might have hurt their feelings. Instead, teachers gently suggested they express themselves another way. Then their parents blamed their teachers for not challenging them enough. At the same time, these teachers were banned from using red ink to grade papers, for fear

that the cruel color might upset students.<sup>280</sup> Constant praise pervaded the school system, where awards were handed out so often that they became meaningless. Grades were continually inflated to the mathematically impossible point where almost everyone was above average.<sup>281</sup> For the few who did get bad grades, parents just kept complaining until teachers raised them.<sup>282</sup>

Parents blamed shortcomings on anything and everything except themselves or their miniature versions of themselves: their trophy children.<sup>283</sup> Poor performance in school couldn't possibly be due to poor parenting. After all, they bought their children personal computers and had been playing Mozart to them since they were still in the womb.<sup>284</sup>

Instead, they told themselves that their children were just too advanced to benefit from standard education.<sup>285</sup> Or they blamed whichever developmental disorders were trendy,<sup>286</sup> then they blamed those disorders not on themselves or even just bad fortune, but instead on vaccines. (Thus perpetuating a completely debunked<sup>287</sup> rumor started in 1998 by one shoddy study<sup>288</sup> conducted by a crooked doctor who was later stripped of his license for serious professional misconduct.)<sup>289</sup>

It was unfathomable to think that their children might not outshine their peers in every subject, or might just be a little young for their grade,<sup>290</sup> or that a healthy 8-year-old might prefer to play rather than pay attention in school. For parents with good insurance, it was easier to medicate their children,<sup>291</sup> and millions of Millennials<sup>292</sup> were unnecessarily strung out on powerful amphetamines<sup>293</sup> before they were old enough to drive.<sup>294</sup>

Helicopter parents didn't stop when their children left high school. They followed their kids to college, where they chose their classes, did their laundry, helped with homework, and, of course, argued with professors over grades.<sup>295</sup> In the early 2010s, it was not uncommon for parents of Millennials to call prospective employers or even accompany their children to job interviews and participate in salary negotiations, behavior unheard of a decade earlier.<sup>296</sup>

Overzealous parents did everything in their power to solve all their children's problems and keep them from ever experiencing failure. Many Millennials grew up inside a bubble where they were amazing at everything they did and nothing was ever their fault. Shielding them from the harsh realities of the world may have spared them some bruised feelings, but all that coddling did them no favors when it came time to exit the protective cocoon their parents had constructed. When they got their first jobs, for example, Millennials found it difficult to fit in because they were so different from earlier generations, and nowhere was this more apparent than the workplace.

## **THE DELUSIONNIALS**

To put it bluntly, Millennials annoyed the daylight out of their employers, and it was not just because they covered their bodies with tattoos and piercings.<sup>297</sup> They repeatedly ignored instructions, insisting that their own methods were better. They called and texted their friends on company time regardless of what they were supposed to be doing. In fact, they expected their employers to buy them smartphones and saw no problem with using them for personal purposes, both at work and at home. They handled criticism poorly, acting as though they had never

been reprimanded in their lives – which, unfortunately, was sometimes the truth. They complained constantly: when their jobs interfered with their social lives; when managers bossed them around; when work just wasn't fun enough. They expected employers to cater to their needs and demanded special treatment, like being allowed to work from home, bring pets to the office, or take time off to pursue their hobbies. If they didn't get everything they wanted, they threatened to quit.

The way Millennials behaved at work dumbfounded older generations. Just a decade or two earlier, employees acting like this simply would have been fired. But turnover costs were high, and it seemed like the next wheel in the Millennial job pool was just as squeaky. This led to shelves of books devoted to helping companies manage this new wave of employees with oversized senses of entitlement.<sup>298</sup> To older generations, Millennials came off as obnoxiously arrogant and cocky. They had been told for so long that they were special and talented that the idea of an entry-level position seemed utterly beneath them. They thought they should start at the top, with salaries and perks normally reserved for veterans with decades of experience. They felt they deserved the best, and were dissatisfied with anything less.

Millennials were overconfident without having done much to deserve it, although it was easy to see how they got that way. They had grown up showered with praise, from parents who told them they were great at everything, teachers who gave them high grades for mediocre work, and coaches who awarded everyone trophies just for showing up.<sup>299</sup> Employers, though, depended on profits and could not afford to continue babysitting them. After

the Great Recession, almost 40 percent of the Millennials of working age were unemployed, and a disproportionately large share of them moved back home with their parents (or had never left the nest in the first place).<sup>300</sup>

## GAZING AT REFLECTIONS

When teens in the 1950s were asked, “Are you an important person?” about one in ten said yes. In the 1990s, eight of ten teenagers said they considered themselves to be important people.<sup>301</sup> In nature, traits that parents share are often amplified in their offspring.<sup>302</sup> The Baby Boomers, who were commonly called the most selfish generation,<sup>303</sup> had, as an extension of themselves,<sup>304</sup> bred a generation of super-selfish narcissists.<sup>305</sup> By objective measures, Millennials had the largest egos in recorded history.<sup>306</sup> The Millennials were distinctly different from all previous generations. However, those differences were not all bad, and those huge egos were not completely undeserved.

Confident and knowledgeable, they questioned authority not for the sake of rebellion, but because they thought they knew better, and often they did. In America, Millennials were the most well-educated generation ever.<sup>307</sup> They were the first to grow up in the modern computer era, which had a profound effect on their personalities. Technology advanced rapidly and they constantly adapted to it, making them quick learners who were unafraid of change. They grew up knowing that the answer to any question was only seconds away, making them excellent critical thinkers who were incredibly savvy and hard to fool. Plus, the collaborative nature of the internet made them great team players.<sup>308</sup>

Millennials also cared deeply about others. In fact, many scholars called them the most civic-minded group of young people since the Greatest Generation.<sup>309</sup> Self-assured, upbeat, and uninhibited, they were eager to solve all the world's problems.<sup>310</sup> Between their senses of self-importance and their passion for social causes, Millennials saw themselves as the people with the ability and responsibility to clean up the messes made by the generations that came before.<sup>311</sup> Raised on a steady diet of affirmation and self-esteem boosting, Millennials believed they were destined for greatness. They were half-right: They had the potential, but they weren't living up to it.

Millennials were overwhelmingly liberal, more so than their predecessors were at their age. They enthusiastically accepted people regardless of race, gender, sexual orientation, or socioeconomic background.<sup>312</sup> They were also the least religious<sup>313</sup> and the least Republican<sup>314</sup> generation. In 2008, American Millennials voted for Barack Obama over John McCain by a ratio of more than 2-to-1, the largest gap between older and younger voters ever recorded.<sup>315</sup> But while liberals felt that they were the ones that cared the most about helping others, in reality, they did the least. To be fair, compared to the 2030s, most people in the 2010s did little to improve the world around them, but of those who did, liberals fell behind moderates, and especially conservatives, who donated the most money and time.<sup>316</sup>

Millennials said they cared about ending poverty, but they gave to charity less frequently than previous generations did at their age. Millennials said they cared about the environment, but they were far less likely than Boomers and Gen Xers to have done anything to reduce their energy



consumption. Millennials said they cared about social injustice, but they were less likely to have participated in the political process by communicating with public officials, taking part in demonstrations, voting, or even just keeping themselves informed about political issues.<sup>317</sup>

Overall, Millennials volunteered less than their parents did, despite having little responsibility and copious free time.<sup>318</sup> Youth service organizations were dying. By 2010, the Boy Scouts of America had shrunk by at least half since the 1970s,<sup>319</sup> and the Girls Scouts also faced sharp declines.<sup>320</sup> One of the only measures that showed any improvement was that Millennial students performed more community service than their predecessors had when they were in high school.<sup>317</sup> For a short period, the media congratulated them for being better than those slacker Gen Xers and self-absorbed Boomers,<sup>321</sup> but when more details emerged, the story changed.<sup>322</sup> As it turned out, service-learning programs had become common in public schools in the space of just a few years, while they were practically unheard of when previous generations went to school.<sup>323</sup> Most students “volunteered” in these programs because they were required to.<sup>324</sup> This caused a brief spike that accounted for the uptick, but created no long-term effect, since students who performed service to fulfill a requirement usually stopped shortly after they got what they needed.<sup>325</sup> Like the Boomers, they wanted to change the world, but unlike the Boomers, they weren’t making much progress on their own.

## **GROWING UP ONLINE**

That’s where Facebook came in. Originally, the site was created by Millennials, for Millennials,<sup>326</sup> and it fit them perfectly. Since they grew up with the internet, they had no

idea what life was like without it. To them, technology was neither new nor novel like it was to their parents. Millennials did not view online services and smartphones as modern conveniences: To them, these were basic necessities.<sup>327</sup>

Almost every last one of them grew up attached to a device that kept them constantly connected to the digital world.<sup>328</sup> Without them, they felt uncomfortable, incomplete, cut off from society.<sup>329</sup> Their lives revolved around these gadgets.<sup>330</sup> In the early 2010s, older Millennials communicated via text message over a hundred times each day, on average.<sup>331</sup> Younger Millennials texted even more frequently<sup>332</sup> and were more likely to own a mobile phone than a book.<sup>333</sup> As opposed to older generations, who mostly used their powerful smartphones only for voice calls, text messages, and photos, Millennials used them to view websites, send email, play games, listen to music, and make videos.<sup>334</sup> In fact, the vast majority of their online activity was social,<sup>335</sup> and the king of social networking was Facebook.<sup>336</sup>

Millennials loved Facebook, and it was easy to see why. Compared to other generations, Millennials were obsessed with fame,<sup>317</sup> and Facebook was a symbiotic ecosystem fueled by narcissism.<sup>337</sup> For Millennials, it was normal and rewarding to tell everyone they knew what they were doing,<sup>338</sup> from where they were vacationing down to minor details like where they were eating, what they were buying, even which song they were listening to at the moment.<sup>339</sup>

Millennials were the most active social networkers.<sup>340</sup> With an average of about 700 Facebook friends each,<sup>341</sup> they could always find people interested in the minutia of their lives, letting them all feel like minor celebrities. Millennials

felt excited when their friends agreed with them about how they decided to spend their time and money.<sup>342</sup> As they grew up, Facebook took over their parents' former role of providing a constant stream of affirmation. And they didn't just like the high they got from social networking: They needed it. In fact, when they were deprived of Facebook, some Millennials showed symptoms of withdrawal similar to those caused by drug addiction.<sup>343</sup> In one survey of older, educated Millennials, most said they could not live without the internet. Four out of five either said it was just as important as water, food, air, and shelter, or else said that it was "pretty close."<sup>344</sup> When college students from 14 countries were given the choice, they preferred internet access over a car 2-to-1, and only those from France said dating was more important to them.<sup>345</sup> The internet was the center of the Millennials' universe, which was a problem because it distorted their perception, making what they did online seem far more important than it really was.

## MILLENNIAL SLACKTIVISM

Case in point: Just five months before Facebook introduced *Badges*, a non-profit group released *Kony 2012*, a film about Joseph Kony, the leader of the Lord's Resistance Army, a violent guerilla group in Africa.<sup>346</sup> It became the most viral video ever, reaching over 100 million views in six days.<sup>347</sup> At the peak of the Kony craze, the video was viewed most often by American teenagers<sup>348</sup> and was spread primarily through social media,<sup>349</sup> Facebook specifically.<sup>350</sup>

This film was immediately ripped to shreds by critics. Despite being half an hour long, it did not contain much information, and what little it did was misleading. So misleading, in fact, that angry Ugandans protested it.<sup>351</sup>

Amama Mbabazi, the Ugandan Prime Minister, said, “It is as if Kony is still in Uganda, as if Uganda is still at conflict and yet of course we all know this is not true.”<sup>352</sup> Indeed, the video spoke almost exclusively about Uganda, even though Kony had left the country six years earlier. Through careful wording and slick graphics, the video also gave the impression that Kony commanded an army of tens of thousands when he actually had only a few hundred soldiers.<sup>353</sup>

As controversy mounted, even more criticisms were leveled against Invisible Children, the non-profit that made the film. For instance, the group advocated supporting the Ugandan government,<sup>354</sup> even though it was one of the most corrupt in the world<sup>355</sup> and was guilty of the same types of atrocities as Kony, including using child soldiers.<sup>356</sup> Others said that the film would make the LRA even more dangerous and put the people who were already working to stop them at risk. One expert on Africa from a well-known Washington public policy group said, “If you want to catch Kony, I can’t think of a dumber thing to do.”<sup>357</sup>

Invisible Children’s financial practices were also called into question since charity rating services gave it poor scores for accountability and transparency,<sup>358</sup> it accepted significant funding from groups that promoted discrimination,<sup>359</sup> and only a third of donations made it to Africa.<sup>360</sup> Later, a video surfaced that showed one of Invisible Children’s leaders joking about keeping \$900,000 of a million-dollar grant from a contest among charities on Facebook<sup>361</sup> – a contest they were accused of winning through fraud in the first place.<sup>362</sup>

Dozens of critics called the entire effort a cash grab. Make no mistake, they said, Joseph Kony was a terrible person, but Invisible Children was recycling outdated news using footage they shot nearly a decade earlier in order to benefit themselves.<sup>363</sup> After all, their organization helped children in Uganda, where Kony was long gone. A former director of the Uganda National NGO Forum said:<sup>364</sup>

*Six or ten years ago, this would have been a really effective campaign strategy to get international campaigning. But today, years after Kony has moved away from Uganda, I think campaigning that appeals to these emotions ... I'm not sure that's effective for now.*

Journalist John Vidal was less forgiving:<sup>365</sup>

*They call themselves “a movement” seeking to end the conflict in Uganda and stop the abduction of children for use as child soldiers, but behind the slick website and the touchy-feely talk about “changing the course of human history”, there’s a hard-nosed money-making operation led by US filmmakers and accountants, communication experts, lobbyists and salespeople.*

With its edgy visuals, hip music, and over-the-top emotional appeals, the video looked nothing like a documentary; it felt like an ad. In truth, the format it used – as any advertising professional could recognize – was that of a highly targeted infomercial<sup>366</sup> for the merchandise it featured prominently throughout the film: t-shirts, stickers, and posters; bracelets which, at \$10 each, they called “the ultimate accessory;” or the handy “action kit” that contained “everything you need” to make people “think you’re an advocate of awesome” for just \$30, plus shipping and handling.<sup>367</sup>

Regardless of whether the true purpose of the film was to raise awareness of Joseph Kony or to line the filmmakers' pockets, no one could argue that it wasn't effective. For better or for worse, Invisible Children knew how to deliver a message that resonated with Millennials. They got young people to watch a half-hour film that contained no foul language or nudity, then share it with their friends, while other marketers had a hard time holding their attention for five seconds. They made an obscure African warlord a household name overnight,<sup>368</sup> and they soon saw evidence of increased support in Washington.<sup>369</sup> In fact, despite all of the video's glaring flaws, it is likely that more than a few of its harshest critics were merely jealous of its success.<sup>370</sup> The filmmakers' genius was richly rewarded, as they made over \$15 million just from selling action kits in the first four days alone, not counting other merchandise and donations.<sup>371</sup>

Their film, however, had vastly oversimplified a complex situation. Joseph Kony operated in an area where every government was rife with corruption and violence,<sup>372</sup> yet the video made it seem as though he were the only one committing human rights violations in Africa. In his part of the world, Kony was a tiny part of a gigantic problem that catching him would not solve, if he could be caught at all. It took the most powerful military in the world ten years and billions of dollars to find Osama bin Laden, who was living in a house in a residential area. Kony, on the other hand, had been hiding in the vast jungles of Africa for over 25 years, all the while escaping the efforts of four governments trying to catch him. (For that matter, the US had already sent troops the previous year to Uganda to help, but since Kony wasn't in Uganda, locals thought the Americans' presence might have more to do with the vast

oil reserves recently discovered in the area.)<sup>373</sup> Finally, any action against Kony would almost surely result in bloodshed and the loss of more innocent lives, even if it were successful. If not, Kony would likely take revenge by slaughtering civilians, as he had done on several occasions,<sup>374</sup> including the Christmas Massacres a few years earlier.<sup>375</sup> The *Kony 2012* video, though, mentioned none of these details. It just made the case that Joseph Kony was evil and left it at that.

Invisible Children could not have predicted the film would get so much attention. They had been producing videos for years and had never attracted a sizable audience before.<sup>376</sup> By the time *Kony 2012* was released, another film they put on YouTube five months earlier, *Who is the LRA?*, had only been viewed about 10,000 times.<sup>377</sup> *Kony 2012* was only scrutinized so deeply because it became so popular; how many other groups have presented information in a certain way to persuade people to support them?

Plus, to their credit, Invisible Children released another film a month later, entitled *Kony 2012: Part II - Beyond Famous*. It was shorter, but heavier on details and closer to following a documentary format, correcting many of the misconceptions caused by the original film. It said that Kony was not in Uganda and that his army was small. It even mentioned that a recent capture attempt had resulted in retribution and talked about peaceful approaches.<sup>378</sup>

However, by the time they released it, the Millennials were gone. *Kony 2012* had reached 100 million people in six days. In that same timeframe, the follow-up film only reached 1.5 million people on YouTube, and it wasn't nearly as popular with younger viewers.<sup>379</sup> Of the Millennials who had made Kony famous, perhaps one out

of a hundred had stuck around to hear the facts. The cornerstone of both videos was an event called “Cover the Night,” in which supporters were supposed to blanket “every city, on every block” with the posters and stickers they had bought, but by most accounts, it was a colossal failure.<sup>380</sup> As one tweet said, “Kony is so last month.”<sup>381</sup> By this time, any remaining conversation surrounding Invisible Children had shifted to how its co-founder, the host of the original *Kony 2012* film, had stripped naked on a San Diego street corner,<sup>382</sup> where he was detained by police for allegedly masturbating in public and vandalizing cars.<sup>383</sup> In October 2012 Invisible Children released *Move*, their next half-hour film, which explained how their project was about to “reach its peak.” However, the attention it received was about one-thousandth the amount that *Kony 2012* had received its first week.<sup>384</sup>

The *Kony 2012* campaign became a shining example of what was wrong with Millennial activism, but that wasn’t the fault of the filmmakers. The problem was the Millennials. The situation contained far more nuance than could fit in a tweet or a Facebook post, so most of it was lost on the them.<sup>385</sup> They bought action kits without having any way of knowing how their money would be spent. They shared the video without thinking of the consequences of a highly publicized military campaign. They wore t-shirts and bracelets without learning anything about the real problems that the people of Uganda were facing, nor did they do anything significant to help them. Worst of all, though, is that they acted as if catching Joseph Kony were of the utmost importance, then, a month later, they had forgotten about it. The action kit had turned a cause into a product that they bought on impulse, quickly got bored with, then threw away.



## THE MILLENNIAL RENAISSANCE

In the end, though, Millennials being focused on themselves and thinking that Facebook was so important was not such a bad thing. Part of the reason Millennials felt so entitled was that they thought they were doing more good than they actually were.<sup>386</sup> They posted a link on Facebook and felt as if they had done something substantial to end violence and suffering in Africa. And who could blame them? *Kony 2012* specifically said that the most important thing they could do was share the video,<sup>387</sup> and they did just that. To Baby Boomers, being part of a movement meant learning everything there was to know about the cause, joining an organization, regularly attending events, meeting with others to work together – meaningful activities that took more than a few minutes and required leaving the house. Before *Badges* came along, Millennials felt like updating their Facebook status was enough to make them part of a movement.<sup>388</sup>

In fact, young people had been using Facebook for years to tell everyone how passionate they were about promoting animal rights, or ending poverty, or helping the victims of natural disasters. A news outlet would release a story about a company's carbon footprint, someone would suggest a boycott, and that comment would be copied and rebroadcast verbatim by millions. Movements spread across the internet like wildfire, but burned out as quickly as they started.

After *Badges* was introduced, though, people started thinking more critically about what they saw online. Just two clicks away from a post urging people to boycott was a Facebook Timeline page that showed every badge the commenter had ever earned for helping environmental

causes. It became immediately obvious whether he or she had been an activist for years or had just recently jumped on the bandwagon.

This forced people to ask themselves some uncomfortable questions before parroting talking points about the latest trendy cause, questions like “Have I ever done anything to help solve this problem?” and “Do I have any idea what I am talking about?” Millennials saw themselves as talented, knowledgeable, and compassionate, but all too frequently, the answer to both of these questions was “No, not really.”

Facebook shined a bright light on our lives by measuring them in terms of our accomplishments. After we started using *Badges*, we could no longer ignore the gap between our inflated self-images and reality, between what we said was important to us and what we actually had done about it. As the generation with the biggest egos and the least life experience, this gap was the widest for the Millennials. Their shortcomings in public service gave them a rude awakening, and that was only the tip of the iceberg. In all other areas of their lives – their hobbies, their health, their dreams and professional aspirations, the very ideals for which they prided themselves and around which they had built their identities – young people were not living up to their own expectations.

Their achievements looked especially unimpressive when they compared themselves to older people. Despite their self-absorption, Millennials had quite a bit of respect for their elders, particularly their morals and their work ethic.<sup>389</sup> More than any previous generation, Millennials saw their parents as friends,<sup>390</sup> but this was part of the reason their expectations were so unreasonably high. Viewing older people as peers skewed their perspective,

and after a lifetime of instant gratification<sup>391</sup> and self-esteem boosting, Millennials had assumed they would already be experts at skills they hadn't even been alive long enough to master yet.<sup>392</sup>

Even when looking at their own age group, Millennials still got the wrong idea. When previous generations were young, they were limited to interacting with a comparatively tiny number of people from their local area. Through this experience, they learned the valuable lesson that most people are average at most things, and they were fortunate to witness even a handful of extraordinarily talented peers growing up. The Millennials, though, saw thousands of them, because they grew up in an internet-shrunken world in which every one-in-a-million person had a YouTube channel. The Millennials barely understood the concept of "average." When older people watched a video of a teenager playing the guitar at a professional level, they were amazed that someone so young could possess such talent. But Millennials just saw a person their own age doing something they liked and thought, "I can do that." Just as television desensitized Generation X, making them hard to shock by overloading them on violence and profanity, the internet desensitized the Millennials, making them hard to impress by delivering a constant stream of world-class excellence.

Millennials held themselves in very high regard, but when *Badges* put their achievements side-by-side with the people they wanted to be like, it finally sunk in that they weren't quite as amazing as they had thought. Their collective burst bubble had a bright silver lining, though. *Badges* knocked them down off their pedestals, but at the same time, it also showed them how to climb back up.

YouTube didn't show the years of daily practice, the gradual progress, the frustration and the failure that led up to an impressive guitar solo. It only showed a three-minute clip of the results. However, one click away was a badge collection that detailed the lifetime of dedication and hard work that made an amazing performance seem effortless. Aspiring guitarists could trace a line of badges back from these grand accomplishments to their own more modest ones to see exactly what they needed to do in order to become that good themselves.

Facebook gave the Millennials a constructive way to emulate their idols. No matter what people wanted to become – a chef, a DJ, a veterinarian, a graphic designer, a senator, a yoga instructor, a NASCAR driver, or the CEO of their own tech company – *Badges* could help. Every life goal imaginable was at the end of a path of badges that formed a clear plan for achieving it, and every path began with simple actions that could be taken immediately. Facebook gave the Millennials the direction they needed to start living up to their lofty expectations as well as the affirmation they craved for each little step they took along the way. *Badges* gave them personal rewards as well as public recognition, which elicited even more encouragement and congratulations from friends.

Facebook helped us all, but it had a particularly pronounced effect on the Millennials. They had been prepared for greatness. They were the most well-educated generation in history with unprecedented resources at their disposal. With their wildly inflated egos, they also had the most to prove, and the most room to improve. *Badges* incentivized and reinforced meaningful behavior, leading

an entire generation to adopt habits that helped them reach more of their potential.

Their lives already revolved around Facebook when *Badges* came along. In what historians are beginning to call the Millennial Renaissance, soon young people were making music, playing sports, writing software, and volunteering more than ever before. With Facebook, they developed the skills they needed to get the jobs of their dreams. They made plans to get in shape and they stuck with them. They learned how to make real progress for social causes, not just sign online petitions. *Badges* even improved their love lives by giving them an accurate idea of what prospective mates were really like, helping them spend less time searching for a good match and more time sharing their lives with one.

With massive debt and a weak economy, the Millennials were predicted to be the first generation in a century to end up worse off than their parents.<sup>393</sup> Comparatively though, Millennials today enjoy longer life expectancy, higher salaries, and more post-secondary education, along with lower rates of divorce, substance abuse, and suicide. By nearly any objective measure, Millennials are doing better than ever. Because *Badges* has facilitated so many of these improvements, it is little wonder why the Millennials never moved on to another social network, but instead have kept Facebook at the center of their richer, more balanced lifestyles for over 30 years.

## BADGES TURNED LIFE INTO A VIDEO GAME

Another reason Facebook was so successful was that it harnessed the power of game mechanics and put them to work in a way that benefited everyone. *Badges* turned life into a giant game, a feat more difficult and more important than such modest words suggest.

## THE SERIOUS BUSINESS OF GAMES

Video games used to be simple.

In the very beginning, we dropped coins into machines at arcades and played until the dreaded words “GAME OVER” appeared. Later, with the rise of video game consoles and personal computers, we bought games to play at home. These games existed entirely on a cartridge or disc, which made them simple products. Like books or movies, we could learn a little about a game from advertising or reviews, but generally the only way to find out if we really liked it was to buy it. When we did, we paid one flat fee upfront, which for new releases was fairly expensive. Finally, just like books, games did not change after they were purchased, which gave us little reason to play them after we had completed them. Since we owned the games, though, when we were finished we could loan them to a friend or sell them.

All this changed around the turn of the millennium when residential broadband service became common.<sup>394</sup> As technology progressed, developers were able to keep people playing longer by using the internet to deliver games in new and interesting ways.

No longer did people have to be in the same room to play a console game like *Halo* or *Madden NFL* together. Online

services like Microsoft's *Xbox Live* and Sony's *PlayStation Network* allowed gamers to play with friends anywhere in the world from the comfort of their own living rooms. They also let game developers augment what shipped on game discs with downloadable content (DLC). DLC breathed new life into games players had already completed by adding new levels or another chapter to the storyline.<sup>395</sup>

Good DLC was a win-win: Players got to enjoy their favorite games again, typically for a fraction of their original price, and new content could bring attention back to a game that had been released a long time ago, stimulating more sales – not to mention the fact that DLC helped combat used game sales and piracy.<sup>396</sup> Some developers released tools that let users expand their games by making and sharing their own content. In one instance, a free DLC package made by a fan turned an obscure, aging game into a best seller,<sup>397</sup> generating over \$10 million in new sales<sup>398</sup> for the company without any marketing, promotion, or development costs.

Massively multiplayer online role-playing games (MMORPGs) like Sony's *EverQuest* and Blizzard's *World of Warcraft* went even further, letting millions of computer gamers embark on adventures together. Customers could download a demo that let them play free of charge for a limited time, long enough to meet a few people and get a feel for the game. Playing further required buying the game as well as a monthly subscription fee, which millions of customers paid continuously for years,<sup>399</sup> because unlike previous games, MMORPGs had no ending. Developers continually expanded these virtual worlds, creating new lands to explore and new opponents to conquer.

These more sophisticated business models helped game companies start making serious revenue. Although digital games did not surpass television to become the largest entertainment industry until 2028,<sup>400</sup> the game industry had already overtaken Hollywood shortly after the turn of the millennium.<sup>401</sup>

In 2009, Rockstar's *Grand Theft Auto IV* had the most successful entertainment release to date, making over \$300 million the first day, which was around as much as the largest book release at that time, J. K. Rowling's *Harry Potter and the Deathly Hallows*, and the largest opening day for a movie, Sam Raimi's *Spider-Man 3*, combined.<sup>402</sup> Two years later, Activision's first-person shooter *Call of Duty: Modern Warfare 3* made \$1 billion in 16 days, faster than James Cameron's worldwide blockbuster *Avatar*.<sup>403</sup> In 2010, Jesse Eisenberg played the role of Mark Zuckerberg in *The Social Network*, and by any measure, the film was a hit. It received nearly perfect reviews,<sup>404</sup> was nominated for eight Oscars,<sup>405</sup> and won more Golden Globes than any other film that year, including best drama.<sup>406</sup> The film was very profitable as well, bringing in \$225 million in ticket sales.<sup>407</sup> That same year, though, *World of Warcraft* alone made about \$1.5 billion, and it was seven years old at the time.<sup>408</sup> In fact, the worldwide video game industry made about \$56 billion in 2010, which was more than sales of books, magazines, DVDs, or movie tickets, and more than twice as much as recorded music.<sup>409</sup>

## THE HIGH COST OF FREE GAMES

Around this time, a radically new model was emerging that shook up the entire entertainment industry, one which did away with the concept of selling games altogether. This



model was called “freemium,” a portmanteau of “free” and “premium” that meant that the basic game was free to play, but premium options cost extra. Freemium games were typically played in a web browser or on a mobile device and were not just demos: People could play them indefinitely for free. Instead, developers made their profit by upselling players into buying virtual goods and additional content, which they could purchase right within the game.

Since freemium games cost nothing up front, people did not hesitate to try them.<sup>410</sup> To draw in casual players, these games were typically quick and easy, at least in the beginning. Later, they gradually became less enjoyable, and this too was by design. For example, what players could do in many games was limited by some form of virtual currency, like gold coins. Basic actions in the game might cost a few coins, while larger amounts could be spent on a wide variety of tempting virtual goods, such as equipment that gave players special powers, limited edition outfits for their avatars, or mystery boxes, each of which might contain a rare or valuable item. New players received some coins for free, but after these were spent, they could get more in one of two ways. Players could earn coins slowly, usually by performing boring, repetitive tasks that often involved a lot of waiting. Alternatively, they could buy as many coins as they wanted, instantly, with a credit card.

When they first started playing, the idea of spending real money on virtual gold in a free game seemed absurd to most people. For a while, earning coins provided the satisfying feeling of working to accomplish a goal, but as the game progressed, advancement required more and more coins. Over time, the game became less about playing

and more about working and waiting. Yet even though the game was less fun, people did not want to quit because that would mean giving up what they had earned so far, especially those who had invested a significant amount of time and effort. At a certain point, players wanted to spend more coins than they had, and that's when they reached for their wallets.

As freemium games became more popular, many developers switched from focusing on making their games fun to making them as addictive as possible.<sup>411</sup> This practice was widely scorned by players, who complained that they ended up spending more on “free” games than on more entertaining games they had bought in the past.<sup>412</sup> Markus Persson, one of the most influential minds in game development, said about the freemium model:

*You get your players hooked on your game, and then you try to monetize them. The idea is to find a model where there basically is no cap on how much the player can spend, then try to encourage players to spend more and more money. Various psychological traps like abusing the sense of sunk costs get exploited, and eventually you end up with a game that's designed more like a slot machine than Half-Life 2.*<sup>413</sup>

Nevertheless, the freemium model turned out to be incredibly profitable. Soon, virtual goods were making real money, as people spent a fortune on free games. Between 2008 and 2010, the amount spent on social games increased 20-fold,<sup>414</sup> and by mid-2011, freemium games were making more than all other kinds of applications in Apple's App Store.<sup>415</sup> In early 2012, the most-played PC game was still *World of Warcraft*, but by July, it lost the number one spot to *League of Legends*, a freemium game.<sup>416</sup> Around the same time, the most popular mobile

game was another freemium app, *Draw Something Free*, which at over 17 million players brought in more people than *World of Warcraft* and *League of Legends* combined.<sup>417</sup> However, this still paled in comparison to the largest source of freemium games: Facebook.

Games were an enormous part of Facebook's business. At first, Facebook made all its money from advertising, but in 2009 and 2010, the share of non-advertising revenue roughly tripled each year.<sup>418</sup> Essentially all of this came from third-party social games, particularly those from Zynga,<sup>419</sup> which was the source of about one-fifth of Facebook's revenue in 2011.<sup>420</sup>

With billions at stake,<sup>421</sup> game developers stopped at nothing to make their games more successful. Zynga's founder said at a Q&A session in 2009:

*...I knew I needed revenues right f-cking now. Like I needed the revenues now. So I funded the company myself but I did every horrible thing in the book to just get revenues right away...We did anything possible to just get revenues...<sup>422</sup>*

What kinds of "horrible things" could Zynga have done? After all, the company just made casual Facebook games. One of its most popular titles involved planting seeds and harvesting vegetables on a virtual farm. These games seemed harmless, not evil, and Zynga even regularly held special in-game events to raise money for charities.<sup>423</sup>

Nevertheless, Zynga received more than its share of criticism. It was accused of exposing its players to scammers,<sup>424</sup> treating its employees unfairly,<sup>425</sup> and systematically<sup>426</sup> stealing games from smaller developers,<sup>427</sup> but these practices were hardly unique

within the game industry,<sup>428</sup> let alone the business world. Perhaps Zynga's worst crime was excelling at exactly what every game maker at the time was trying to do, and that was to make incredibly addictive games.

## STRUNG OUT ON ENTERTAINMENT

Just how addictive were social video games? Although game addiction was not yet an officially recognized disorder, many scientists compared it to drug addiction.<sup>429</sup> Freemium games were like the savvy crack dealers who gave away samples to new customers, just enough to make sure they would come back for more. The first hit was free and very rewarding, but soon users needed more and the costs quickly increased. In the worst cases, it cost people their savings, their families, even their lives.

In 2011, an American woman pleaded guilty to embezzling over \$166,000 to spend primarily on two Facebook games: *Mafia Wars* and *YoVille*.<sup>430</sup> The previous year, another woman in the UK had her three children taken away when child protective services discovered that she had been so engrossed in an online game that she had stopped taking care of her family, leaving her kids to eat cold beans from a can.<sup>431</sup> Earlier that year, a couple in South Korea spent so much time playing an online game in which they cared for a virtual child that they allowed their real infant daughter to die of starvation.<sup>432</sup> These games could be so consuming that some people ignored not just others, but also their own safety, literally playing themselves to death. In the early 2000s, several people died after marathon gaming sessions,<sup>433</sup> sometimes playing 50 hours at a stretch.<sup>434</sup> These were rare extremes, but they illustrated the extent of the addictive power of games. Left unchecked, they could have damaging effects.<sup>435</sup>

Most of us never experienced such serious problems, but social games nevertheless wormed their way into our lives. In 2011, playing an online social game was a daily habit for more than 80 million people in the US and UK, and about 50 million played multiple times each day. About half the time players visited Facebook, they did so specifically to play a game, which they typically did for between 15 minutes to two hours at a time, and these were just the casual players.<sup>436</sup> The media had long perpetuated the idea that video game players were pasty, socially awkward young males,<sup>437</sup> but in reality, the average player was a 39-year-old woman who had been playing for at least a year, if not longer. In fact, close to half the population regularly played social games, and the amount we played was rising rapidly in practically every way it could be measured.<sup>438</sup>

Ever since Atari released *Pong* in 1972,<sup>439</sup> video games have only grown in popularity, but before the turn of the millennium, rarely had we heard of games ruining lives, or of middle-aged women playing them for that matter. Electronic games had always been an amusing way to relax and unwind, and entertainment continued to be a primary reason people played them, at least at first.<sup>440</sup> However, more modern online games had specific features that convinced a broad audience not just to try them, but furthermore to keep playing long after the novelty had worn off.

Most notably, games had evolved from solitary into social activities. Constant interaction with other people turned games into a source of conversation and companionship. Real friendships formed in these virtual worlds. A survey of *World of Warcraft* players found that over half had made

friends through the game whom they later met in person, and one in eight had met a romantic partner.<sup>441</sup>

Social interaction explained why people played in general, but not necessarily why they spent so much time with the same games. Soon it became clear that the most addictive element in these games were their achievement systems, which could drive people to keep playing long after the game ceased to be entertaining or even enjoyable, at least in a traditional sense, and became more work than play.

In the late 1990s, Troy Stolle, an Illinois construction worker, toiled relentlessly to earn the rank of “Grandmaster Blacksmith” in the first true MMORPG, *Ultima Online*. Writer Julian Dibbell described Stolle’s efforts in *Wired*:

*To reach that level, Stolle spent six months doing nothing but smithing: He clicked on hillsides to mine ore, headed to a forge to click the ore into ingots, clicked again to turn the ingots into weapons and armor, and then headed back to the hills to start all over again, each time raising [his avatar’s] skill level some tiny fraction of a percentage point, inching him closer to the distant goal of 100 points and the illustrious title of Grandmaster Blacksmith.*

*Take a moment now to pause, step back, and consider just what was going on here: Every day, month after month, a man was coming home from a full day of bone-jarringly repetitive work with hammer and nails to put in a full night of finger-numbingly repetitive work with “hammer” and “anvil” - and paying \$9.95 per month for the privilege.<sup>442</sup>*

Stolle’s dedication was not unique. A decade later, multiple studies found that the typical *World of Warcraft* player spent so many hours per week in the virtual world of

Azeroth that the game essentially took the place of a part-time job.<sup>443</sup>

## AZEROTHIAN ECONOMICS

The more people played *World of Warcraft*, the more they were motivated by the game's achievement system,<sup>444</sup> which to this day is one of the largest and most intricate ever created. It consisted of thousands of challenges,<sup>445</sup> each with various point values assigned to them. These achievements ranged from the very easy, which a single player could complete in a few minutes, to the nearly impossible, which required large groups of skilled players to work together for weeks or even months to defeat powerful opponents while imposing frustrating handicaps upon themselves, all for the sake of earning a few points.

Completing these challenges was entirely optional. What's more, these points did not affect gameplay whatsoever. More points did not make a character more powerful, nor could points be redeemed for virtual goods. Despite their lack of utility, players found themselves going out of their way to collect these points for all sorts of reasons.

All players earned a few achievements naturally throughout the course of the game, leaving them with a long to-do list with only a few items crossed out. A sense of duty compelled some players to finish what they had started. Others just could not stand leaving a list like that incomplete. Either way, they happily traveled around Azeroth performing the tasks they had been assigned for the satisfaction that came from steadily checking them off the list. Others earned achievements out of pride, completing as many as possible to see how many points

they could rack up, or conquering particularly difficult challenges just to prove that they could.

Still others completed achievements to boost their online identity. For instance, a handful of achievements offered honorary titles for completing them. Traveling to every major area in Azeroth would allow a character named Grabthar to be called “Grabthar the Explorer.” Nearly half of all players completed this challenge,<sup>446</sup> but others that were harder to obtain conferred some level of social status. For example, being called “Arena Master Grabthar” would let everyone know that the player had reached the highest ranks of the game’s gladiator-style combat tournament,<sup>447</sup> while “Grabthar the Insane” would indicate that the player had spent literally hundreds of hours performing unbelievably repetitive tasks for the sole purpose of earning that title.<sup>448</sup>

A small segment of players took the role-playing aspect of the game very seriously, acting as if Azeroth were a real place, so they sought titles befitting their mighty warrior and warlock alter-egos. The vast majority, though, saw *World of Warcraft* as just a game and never confused themselves with their avatars, but they still worked hard to make their image more impressive. In a world where 10 million players all shared the same 26 basic 3-D character models, people strove to differentiate themselves, and the achievement system provided a clear way to do that. Accomplishments shaped the way players were seen and treated by the thousands of real people they interacted with in the game, which meant achievements gave social benefits as well.

When people evaluated each other – to decide whom to play with or just to determine who was the better player –



they typically looked at two criteria: their equipment and their achievements. In other words, players judged each other by what they had obtained and what they had accomplished, the very same criteria people have used to judge each other throughout all of history. In *World of Warcraft*, however, these measures were much more easily quantified and compared.

The value of a player's equipment was typically reduced to a single number, known as a "gear score," which measured how powerful characters were based on the armor and weapons they had acquired.<sup>449</sup> This number served as a sort of credit rating since people with higher scores generally tended to perform better. When choosing a team for a quick activity, casual players made snap decisions and picked the people with the best equipment.

More serious players gathered together in large groups, known as guilds, who played together for several hours at a time, multiple times each week. During many activities, one wrong move by a single player could cause the entire group to fail, so guilds needed to know a player was competent before they invited him or her to join their ranks. Top guilds had hundreds of applicants for each opening on their team, so they needed a reliable way to sort through them. They too looked at gear scores, but this number was just a benchmark of how well players could perform in theory. How much of that potential they reached was based on their skill level, and a gear score said nothing about that. Just as wearing a wetsuit did not make someone a professional diver, powerful armor did not necessarily mean a person was a good player. Plus, as the game progressed, it became easier for people with little experience to obtain good gear, which made achievements

matter more than ever.<sup>450</sup> Achievement point totals gave a rough measure of how much a person had played the game, and the right individual achievements could show that a player had the kind of experience the guild was looking for. In fact, it was common for guilds to state on their applications that only players who had earned certain specific achievements would be considered.

## LIFE, GAMIFIED

Beyond entertainment, achievements in *World of Warcraft* gave players a sense of self-worth, purpose, and direction. Achievements guided people's behavior and pushed them to accomplish great feats. Achievements defined people's identities and let them quickly sift through mountains of information to learn reliable facts about others so they could make informed decisions. And everything that Blizzard's achievement system did for the denizens of Azeroth, *Badges* did for the inhabitants of the real world.

Facebook turned life itself into a game, the largest massively multiplayer social game ever. For practically every activity imaginable, *Badges* had a collection of achievement paths, which were all mini-games themselves complete with their own point systems, leaderboards, and prizes.

We didn't even have to go out of our way to play. In fact, most of us started playing without realizing it. Listening to a song, going to the gym, taking a class – nearly everything we did got us closer to earning some badge or another. The resulting flood of awards would have been overwhelming if not for Facebook's combination of personal preferences, crowdsourced ranking, and predictive filtering that made

the most important badges bubble up to the top, where the badges we cared about most became trophies we showed off to the world.

Of all the similarities to video game achievement systems, though, the most meaningful was that *Badges* motivated us to pursue goals we had never considered before, and furthermore to keep working toward them long after we would have otherwise given up. By turning life into a game, *Badges* got us to work harder and to enjoy ourselves while doing so. Earning points was gratifying. We liked receiving badges, and we especially liked the perks that came along with them. We also appreciated how Facebook showed our friends what we had accomplished, since it let them know without making us seem like we were bragging. Most of all, though, we loved how these game mechanics made us feel – which was surprisingly good.

## POSITIVELY ADDICTED

For decades, video games revolved around conquering opponents. Each game had a distinct winner: the player who earned the highest score, crossed the finish line first, or survived the longest. Gameplay consisted of clear, simple actions, like collecting coins or shooting aliens. Such tasks gave us a rush of dopamine,<sup>451</sup> which is one of the brain's most powerful “feel-good” chemicals and is linked to pleasure, motivation, and addiction.<sup>452</sup> In general, though, these primitive games pushed buttons that the male brain found more rewarding,<sup>453</sup> which helps explain why fewer women played.

As games became more social, though, they became less about winning and more about interacting with others. In *FarmVille*, for example, players planted seeds, harvested

vegetables, and built barns. They could visit their friends' farms to water their crops or leave messages for them. However, they could not defeat their friends, or even "win" the game for that matter. Even games built around violent combat became less adversarial and more about cooperation. In *World of Warcraft*, slaying the largest dragons required a group of people to work together toward a common goal. Players needed to communicate effectively and support each other to have any hope of success. These more mature games appealed to women, and by 2012, of those playing computer and video games, adult females outnumbered young males three to one.<sup>454</sup>

At the same time, Pinterest was taking the internet by storm, growing faster than any other website in history, by some measures.<sup>455</sup> Pinterest was not a game, per se, but another form of online entertainment: a virtual pin board on which users could organize photos – not their own photos, usually, but ones they found elsewhere – into collections, similar to scrapbooking. It was so addictive to females that one journalist called it "digital crack for women,"<sup>456</sup> but just as women thought early video games were pointless, men did not "get" Pinterest. In fact, in the beginning, 98 percent of the people who liked Pinterest on Facebook were female.<sup>457</sup>

This behavior can also be explained on a chemical level. Many women were using Pinterest to create vision boards, collages of images that showed what they valued and desired in their lives. As it turns out, sharing personal information also activates the brain's dopamine system just like shooting aliens does.<sup>458</sup> In men however, the promise of a social reward typically activates only a small portion of this system, compared to a much larger portion

for tangible rewards. With nothing concrete to be gained and no clear action to take, many men found Pinterest pointless. On the other hand, female brains typically value both kinds of rewards equally, and value social rewards far more than men do,<sup>459</sup> making Pinterest a very pleasurable application.

When Facebook introduced the “Lifetime Goals” feature to *Badges*, it allowed people to add any badges they hoped to earn someday, which let them create a collection of their hopes and dreams, much like Pinterest, which appealed to women. However, along with each badge came a checklist full of tasks to complete and badges to earn, which made the exercise seem much more useful to men.<sup>460</sup>

Making such a list is a crucial step toward actually achieving a goal, one that we used to frequently skip because it was so laborious. With *Badges*, one click gives us a complete roadmap. What’s more, most achievement paths are designed by leading professionals in their field, or at least people who know exactly how to accomplish a goal because they have already done so themselves. *Badges* rewards us for milestones and helps us set deadlines, maintain realistic expectations, and measure our progress – all hallmarks of good planning that are hard to put into practice on our own. With expert advice and social support, Facebook sets us up for success. And each task we check off, every milestone we reach, every badge we earn comes with yet another hit of dopamine, making us feel happier, more productive, and less depressed, reinforcing the entire experience.

As time went on, more of the badges we earned were for helping other people, which can also be explained with neurochemistry, at least in part. Along with dopamine,

using Facebook also elevates levels of oxytocin,<sup>461</sup> another feel-good brain chemical linked to empathy, love, and trust.<sup>462</sup> Oxytocin makes people more charitable<sup>463</sup> and counterbalances testosterone, which is associated with selfish and cruel behavior.<sup>464</sup> This feeling of generosity made us more receptive to the idea of volunteering, including those of us who had never done so before.

For many, *Badges* simply gave us the direction we needed to start working for a cause we cared about, although others began doing good for less noble reasons. To some, *Badges* felt less like a game and more like a public record of our decisions, which was unwelcome to those who voiced their opinions loudly but did little to back them up. The first few times these people volunteered was the result of social pressure, since we tend to be on our best behavior when we are being watched. Others began volunteering purely to get rewards, like promotional discounts from retail partners.

This was especially true for young people who gave their time to get special features in video games that could not be obtained any other way. Millennials were used to getting whatever wanted with little effort, but in the case of action-based content, there was no way to buy, cheat, hack, or pirate their way around it. For many in this generation, the first time they volunteered was to unlock something they desired in their favorite game.

Regardless of what initially motivated us, *Badges* got us to volunteer more, and while some of us may not have started for the best of reasons, once we got going, we were hooked. We got out of the house, made new friends, tried new activities,<sup>465</sup> and enjoyed the natural high that comes from helping other people. Driven by doing good things for

ourselves and others, all that dopamine and oxytocin created a self-sustaining loop of positive reinforcement which only intensified our Facebook habit.

For many, social media applications were already harder to resist than cigarettes or alcohol, and many people found the urge to use them almost as strong as the need for sleep or sex.<sup>466</sup> Some psychiatrists even suggested that “Facebook addiction” might be considered a clinical disorder.<sup>467</sup>

Adding *Badges* made Facebook even more addictive, but at the same time, it appealed to a wide spectrum of human needs, including everything from our primal urges to hunt and gather to our more refined needs for self-actualization and acceptance within a community. All of these created a cocktail of pleasurable chemicals that got us hooked for life.

Every aspect of *Badges* was addictive by design. Achievement paths drew us in by offering immediate benefits that were easy to earn, then showing us how the next step offered an even better reward and required only a little more effort to reach. The more we put in, the bigger the rewards, and after we invested enough, psychological phenomena like loss aversion and the sunk cost fallacy compelled us to keep going, eventually putting in more time and effort than we ever would have dreamed.

If this all sounds familiar, it should, because these very same mechanics are not only what make freemium games so addictive, but also the loyalty marketing programs discussed earlier, which are essentially games themselves. Spend some money, get some points. Earn enough points and you get a prize. Yet instead of influencing us to become

loyal to a particular brand, Facebook helped us to become loyal to ourselves and our communities. To dedicate our time to doing more and becoming better people. To get addicted to improving ourselves and making the world around us a better place. And just like with loyalty programs, we didn't feel coerced by Mark Zuckerberg or resent him for affecting our lives this way; in fact, we loved him for it.

## **BADGES IMPROVED FACEBOOK'S CORE BUSINESS**

Even before *Badges* turned life into a game, there was already strong evidence that games could be used for productive purposes, and could even advance our society.<sup>468</sup> For example, games had already gotten people to contribute to scientific research in ways they never thought they could have. One such game let ordinary citizens search images of space, leading to the discovery of two planets.<sup>469</sup> Another game let players help researchers at UCLA diagnose malaria with about the same accuracy as an infectious disease expert.<sup>470</sup> Similarly, another game enabled people to analyze images of tuberculosis cells for the Harvard School of Public Health. By turning it into a game, a thousand people accomplished in two days what would have taken researchers months or even years to complete.<sup>471</sup>

Games were also great for teaching new skills. The US military used games to train special agents;<sup>472</sup> in fact, it had been using video games to create better soldiers since the early 1980s.<sup>473</sup> In 2008, a civilian was able to provide proper care to victims of a highway accident using first aid knowledge he learned playing *America's Army*, a game developed as a recruiting tool.<sup>474</sup> Video games helped save



many more lives as well, since virtual reality simulations became a regular part of training<sup>475</sup> that significantly improved surgeons' performance in the operating room.<sup>476</sup>

## CADILLAC, THE FACEBOOK OF CARS

When companies started mixing beneficial games with social networking, though, they increased the number of potential players and introduced an important aspect: social competition. Mobile apps like *Fitocracy*, *Nexercise*, and *RunKeeper*, for instance, let users earn points and awards by working out, which they could compare against those of fellow exercise enthusiasts.<sup>477</sup> These games created online communities based around common interests, some of which were very narrow. For example, *Opower* let people compete against their neighbors to see who could lower their monthly energy usage the most.<sup>478</sup> On their own, games like these only reached fairly small groups of likeminded people. Facebook, on the other hand, had an audience of nearly a billion people who were, collectively, interested in everything imaginable.

Facebook's massive user base was the envy of the tech world. The social media landscape was littered with hundreds of companies trying to become the next Facebook of something. *LinkedIn*, *Jive*, *Yammer*, and *Chatter* were all trying to become the "Facebook of Business."<sup>479</sup> *RunKeeper*, for that matter, was trying to become the "Facebook of Fitness."<sup>480</sup> But Facebook was already, well, Facebook. The undisputed king of social networking. The place everyone went to interact with friends and share information about their lives.

Game developers were trying to create their own social networks,<sup>481</sup> but if Facebook had seen this as a threat and

responded in kind by trying to make its own games, it would have failed. Instead, it embraced this trend and built a system that let anyone make social games, which ended up being the key to its success.

Other companies that built achievement systems also designed all the achievements, and this is where they went wrong, because retaining such tight control severely limited their audience and their growth.<sup>482</sup> Facebook, on the other hand, built the most massive achievement system ever without making or awarding a single badge itself. The company knew that it couldn't possibly create meaningful badges and achievement paths for everything its users cared about. Facebook also recognized that badges would be more valuable if they were awarded by third parties. If we read on Facebook that someone had been a wrestling and water polo champion at Stanford, where he then graduated *summa cum laude*, we might suspect him of stretching the truth. If those details came straight from Stanford, though, they would carry considerably more weight.

For every kind of information imaginable, there were already sources we trusted, and Facebook did not try to replace them. Instead, Facebook stuck to its strength, which was connecting people. With *Badges*, Facebook created a simple interface through which any organization could interact with individuals and display the valuable information they had about them in a useful, consistent manner.

The ability to show verified data instantly made Facebook the authoritative source for all kinds of personal information, and soon companies were tripping over themselves to become the “official” provider of such data.

As a result, Facebook became the world's most trusted source of information about people without having to collect or verify any of that information itself.

When Facebook turned life into a game, it wisely did not try to control that game. Facebook won because it was satisfied just to keep score.

## LIFE'S SCOREBOARD

*Badges* gave us new ways to express and define ourselves that appealed to some of our strongest psychological needs. Curating our badge collections let us share what was most important to us: our greatest accomplishments, our lifelong ambitions, and what we were working on at the moment. Millennials in particular were desperate for ways to express themselves and appear unique. They were six times as likely as older adults to have a non-traditional body piercing, and before turning 30, nearly four in ten had a tattoo.<sup>483</sup> But on Facebook, everyone decorated themselves with badges.

Our collections served as trophy cases, résumés, bumper stickers, printed t-shirts, and status updates in a concise, graphical format. *Badges* turned experiences into icons, and we expressed ourselves through our choices of imagery and symbols. The visual mix of our top badges became our logos, modern versions of medieval coats of arms that branded us by communicating what made up our unique identities.

Consolidating all our accomplishments in one place like this turned *Badges* into the scoreboard for our lives. Years ago, people who wanted to see what old friends had been up to looked at their Facebook Timeline pages. On the other hand, managers typically went right to the work and

education section when reviewing profiles of job applicants. Likewise, when checking out potential dating partners, the first thing men viewed were photos, while women would most often look at relationship status before anything else.

Today, though, everyone skips straight to the scoreboard. In 2015, researchers found that the first area almost all people looked at when viewing a Facebook profile was their badge collection, regardless of the reason for their visit. Whether they were looking to see what their friends were doing or find out what set a prospective employee out from the crowd, all the information was in one place. Later that year, *Men's Health* published an article called "How to Look Good on Facebook," which gave the following advice:

*Share what you like with your close friends, but the badges you make public are the first details someone stalking you on Facebook learns about you. That person could become your next girlfriend or boss, so if you want to get laid or get paid, you need to make a good first impression. Your badges are more than a report card. They are a distilled version of you. Most people form an immediate opinion of you based on the first badges they see on your main profile page, a.k.a. your Top Six. Ideally, these should show that you...*

- 1) *...are successful*
- 2) *...are physically fit*
- 3) *...are smart*
- 4) *...are talented*
- 5) *...have a good sense of humor*
- 6) *...have good taste*
- 7) *...are fun to be around*
- 8) *...are generous*
- 9) *...are interesting and unique*

*You need to communicate nine qualities with six badges, so you will need some that serve double duty,*

*like one for running in a charity marathon, which shows you are both fit and generous. Keep your collection current. Nothing reeks of desperation like a guy with a bald spot who still has a high school football championship badge in his Top Six. If you don't have badges that can display everything on this list, stop reading right now, and get out there and earn some.*

Cosmopolitan offered some similar advice about charity in a feature titled “What Badges Say About Him... and You.” An excerpt:

*Sure, bad boys get our attention, but what really drives us wild is finding out that the hot guy who races motorcycles also volunteers at an animal shelter. Did you know that “generous” is code for “good in bed?” That goes for you too, ladies, so make sure to show off at least one do-gooder badge of your own. Looking like all you care about is yourself is a total turnoff.*

These articles highlighted how *Badges*, by design, revolved around what was important to all of us as Facebook users: ourselves, and what other people thought about us<sup>484</sup> – even when talking about charity. Although this approach may seem shallow, it is another reason why Facebook succeeded and ended up making us all more generous in the process.

Even before *Badges*, our good deeds could have appeared in our Facebook posts or timelines, but *Badges* put charitable contributions front and center in our profiles, right alongside all our other accomplishments. This seemingly minor visual detail elevated charity's importance by making it part of the scoreboard we used to define and measure ourselves. We all knew the unwritten rule that said we should have at least one recent badge for donating some time or money on our profile. When none were there,

the absence was conspicuous and prompted gentle ribbing from friends, or, in the case of public figures, angry complaints from critics.

But the reasons why *Badges* convinced us to become more generous ran deeper than just peer pressure. In fact, many other attempts at using social media to convince people to do good turned people off, largely because many worthy causes are simply not that compelling to the average person.<sup>485</sup>

*Badges*, on the other hand, was not about charity. It was about us as individuals and our accomplishments, and about leading a full, rich life. No matter what was important to us, there were badges for everything imaginable. Constantly looking at our scoreboards got us to work to improve our ranking, which sometimes also meant becoming more charitable. For example, *Badges* encouraged us to be more social, watch less television,<sup>486</sup> and become more active in our religious communities,<sup>487</sup> all of which are also associated with volunteering.

Facebook made us receptive to charitable opportunities by presenting them not as chores, but as ways to enrich and enjoy our lives. *Badges* piled on the incentives, but most of us didn't need more than a nudge. Since we had always thought of ourselves as charitable people, the scoreboard just reminded us to actually do something about it.<sup>488</sup> Even starting with one small kind deed made us more likely to perform larger ones later – a widely-observed phenomenon known as the “foot-in-the-door” effect.<sup>489</sup> Facebook was already the center of our online identities and social lives, and *Badges* made charity a part of them.

## ZUCKERBERG'S LAW

Old guard business analysts criticized Facebook for not producing anything, but that wasn't entirely accurate. Facebook was a factory, and its core product was the status update. We, the workers, cranked out nearly half a billion of them each day in 2011, along with over 3 billion "likes" and comments,<sup>490</sup> and it looked like these numbers would never stop increasing. In 2008, Zuckerberg himself predicted that the amount of information we share would double each year, and he wasn't far off.<sup>491</sup> However, our lives were not getting twice as interesting each year, which meant that we just kept sharing more and more mundane details of our lives. Our free time and attention spans were not doubling, either, so the more everyone said, the less anyone heard.

For years, Facebook had already been deciding which news to show us based on what its algorithms thought we would find interesting.<sup>492</sup> In fact, by 2012, our average Facebook posts never reached almost 90 percent of our friends.<sup>493</sup> This made our news feeds more manageable, but it also meant that much of what we thought we were sharing was actually unseen, and it could even make some of our friends disappear without us realizing.<sup>494</sup>

*Badges*, on the other hand, included information that let Facebook's filters make more intelligent decisions. A badge's significance could be gauged by its global ratings, which meant that landmark achievements like graduating from college were shown to everyone. Facebook also compared users' badge collections to show announcements more often to people with similar interests. Meanwhile, socially irrelevant badges, like most from retailers or video games, were rarely shared with anyone by default.

Posts with photos already got more feedback than text-only updates, or even those with video,<sup>495</sup> but *Badges* created an entirely new breed of status update. Meaningful badges required some kind of real achievement to earn, so badge announcements were less common and more interesting than regular posts, which led them to be many times more popular, too. This trend was self-perpetuating. As badge posts received more attention and others received even less, people learned that if they wanted to get our attention, they would have to earn it.

## SAYING MORE WITH LESS

Many of the people who had been filling Facebook with whatever was on their minds at the moment found their audiences diminished. For those who remained, *Badges* helped further by improving the quality of the conversation.

Since the dawn of the internet, online discussions had been infamously useless, with everyone tossing in their two cents. With *Badges*, though, credentials could be instantly verified, showing who knew what they were talking about. Thanks to some simple badges, it didn't require a Master's degree to put a little authority behind one's words, nor to raise the level of online discourse.

In 2012, a battle was raging in America over the Patient Protection and Affordable Care Act, better known as Obamacare. After a controversial Supreme Court decision that was so complex that two of the top three news channels initially reported it wrong,<sup>496</sup> millions of people without law degrees headed to Facebook to give their not-quite-expert opinions about this 193-page ruling.<sup>497</sup> This quickly devolved into a brawl because people were too



uninformed to have a productive discussion. Despite being the most closely followed story of the month, only about half of Americans knew even the first detail about the decision, but most everyone had an opinion about it.<sup>498</sup>

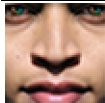
When *Badges* was introduced about a month later, a new nonpartisan service called *CheckYour.info* quickly released a short quiz designed to dispel misconceptions about the legislation – the five myths most popular among Democrats as well the five most popular among Republicans. Answering all ten questions correctly earned the *Obamacare Basics* badge. As arguments ensued in the coming months, some users began posting the badge when they refuted particularly misinformed statements, telling people to get the basic facts right before lecturing others about topics they didn't understand. The trend spread rapidly across Facebook and within a week, over 30 million people had earned the badge.

This was an amazing phenomenon. An enormous chunk of voters suddenly became better informed about an important issue right before a presidential election. Through social pressure and fear of public embarrassment, people actually started checking facts before voicing their opinion – a practice rarely seen before. Many of the most flawed arguments on both sides disappeared as people either deleted their erroneous comments or refrained from making them in the first place. With all that racket gone, the pointless shouting match shifted toward a real debate.

Over the years, *CheckYour.info* has made tens of thousands of quizzes, and its balanced top ten format has made it more popular than Wikipedia for many of the topics it covers. One of its dreaded *TripleChecked* badges is the last thing we want to see in a reply to one of our

arguments, since people only post them when we are wrong about a fundamental fact. This is why it is still common today to take a *CheckYour.info* quiz before making a comment about controversial issues.

Illustration: Facebook conversation



**Kirk Threadlew**

If you love your kids then tell Senator Graham to support the gas tax so the Earth won't be ruined by cars.

Like · Comment · 5 hours ago near Las Vegas, NV



**Dani Taylin** #1) Evidence shows that raising gas a dime will have almost no effect on consumption. #2) The proceeds from the tax don't go to any environmental cause. Seriously, CheckYour.info. ;)



**TripleChecked: Alternative Fuels**

CheckYour.info

Like · Comment · View Badge · 1 hour ago via mobile

👍 6 people like this.

## THE FALL OF PINK OCTOBER

*Badges* did similar wonders for other social causes, too. People started checking their facts before promoting a movement they just heard about, and a quick look at someone's badge collection showed others just how long they had been an advocate. People could earn a badge for sharing a video or donating a few dollars, but easy tasks like these were just the first steps in longer achievement paths which guided people toward more meaningful action.

For example, back in 1985, October was declared National Breast Cancer Awareness Month by the American Cancer Society and a pharmaceutical company that makes cancer drugs. This campaign to promote mammograms helped increase diagnoses in the mid-1990s, but after that, it had

little such effect,<sup>499</sup> and doctors later said it had outlived its usefulness.<sup>500</sup>

Nevertheless, the movement continued to pick up steam, although all the hype surrounding breast cancer did little to help women. Obsessed with youth and beauty, the media focused on patients who were diagnosed early in life, which was relatively rare,<sup>501</sup> and women, particularly younger women,<sup>502</sup> became terrified of breast cancer.<sup>503</sup> One study of women under 50 found they thought they were over 20 times more likely to die of breast cancer within ten years than they actually were.<sup>504</sup> Fear created demand, and each year more and more articles were written about breast cancer instead of more dangerous diseases.<sup>505</sup>

These distortions helped make breast cancer women's top concern, even though they were far more likely to die from lung cancer and over ten times as likely to die from heart disease<sup>506</sup> – both of which women could have been doing more to prevent because doctors already had proven strategies for avoiding them.<sup>507</sup> However, even by the 2010s, despite decades of generous funding, medical science was only beginning to understand how breast cancer works and had barely made a dent in incidence or mortality rates.<sup>508</sup>

Breast cancer awareness, on the other hand, had grown into a multi-billion dollar business, although woefully little of that money ever went to fight cancer. Instead, it went to telemarketers, scammers, and companies who turned their products pink to associate themselves with the cause without actually doing much to further it.<sup>509</sup>

Each October, from shopping bags to windbreakers to footballs to the front of the White House, it was hard to

find anything that wasn't covered with pink ribbons. And every year, Facebook got a similar treatment as millions of users did their part to spread awareness in the best way they knew how: by updating their status. At first, some posted statistics, some promoted fundraisers, some shared links to stories about cancer survivors or talked about people close to them who had been affected by the disease. At the end of 2009, though, many women began forwarding chain letters that instructed female friends to state their bra color in their Facebook status and to not tell any men what it meant.<sup>510</sup> These messages said the point was to raise awareness for breast cancer research, although they didn't mention how this would be accomplished. Over time, this meme became even more cryptic and moved further away from having anything to do with breasts, let alone cancer research. Chain letters in October 2010 told women to say in a sexually suggestive way where they liked to keep their purses. A year later, women were asked to use the numbers in their birthdate to construct a bizarre message that implied they were experiencing pregnancy cravings.<sup>511</sup> These posts were ineffective at best, and people actually affected by the disease found their shallowness offensive.

Part of the problem was that most popular campaigns were centered around finding a cure, even though medical experts said they should focus on prevention.<sup>512</sup> In fact, their pink-themed approach may have been counterproductive by actually making women less likely to get screened.<sup>513</sup> Despite the fortune poured into the breast cancer awareness industry, most women were not even following the most basic recommendation – to get mammograms yearly after age 40 – even if they had insurance.<sup>514</sup>

Awareness was not enough. The real goal was to get people to take action, which is exactly what *Badges* was great at measuring. With *Badges*, people couldn't spend ten seconds updating their Facebook status and fool themselves into thinking they had somehow joined the fight against cancer. They had to actually do something.

## WALKING THE WALK

In October 2016, the American Cancer Society released two badges that bypassed the retail purveyors of pink overload and were awarded directly to individuals. The *Talking the Talk* badge required people to pass a quiz on breast cancer, then participate in an act of advocacy, like making a small donation, participating in a fundraiser, or sending a letter to Congress about cancer research. The *Walking the Walk* badge, on the other hand, required people to earn a third-party badge for regular exercise, plus sign a public pledge to maintain a healthy weight and limit alcohol consumption. Furthermore, women over 40 also had to have a badge for receiving a mammogram within the last 14 months.<sup>515</sup>

The Deputy Chief Medical Officer of the American Cancer Society, Dr. J. Leonard Lichtenfeld, explained the reasoning behind the badges on his blog:<sup>516</sup>

*These two badges were carefully designed to communicate two specific ideas.*

*Breast cancer already gets enormous amounts of attention, but much of what is said about it is misleading or flat out wrong. With the first badge, Talking the Talk, we want to say to people who want to be advocates, "We'd love to have your enthusiasm, but you need to be informed."*

*As for the second badge, calling it “Walking the Walk” caused a bit of a stir, but we did that to get people talking. With how many walk-a-thons we have organized in the last 25 years, people would think they’d get the badge for participating in one, but that’s not what “walking the walk” means, at least not when it comes to breast cancer.*

*What we know is far from complete – but right now the best strategy is to maintain a healthy weight, get regular exercise, limit alcohol consumption, and for women over 40 to get yearly mammograms.*

*First and foremost, even more than coming out and raising funds for us, we want women to “walk the walk” by taking care of their own health. If we can get more people to do that, then this intervention can be considered successful.*

Of course, National Breast Cancer Awareness Month is now a thing of the past. As medical research progressed, it became clear that mammograms were no magic bullet in the fight against breast cancer, especially for younger women.<sup>517</sup> In fact, most of the advice that the American Cancer Society could offer women amounted to adopting to a healthy lifestyle – one which had an even greater chance of lowering their risk for diabetes, heart disease, stroke, and other types of cancer – which resulted in several other major groups trying to deliver almost identical messages.<sup>518</sup>

Once activists were able to move past general awareness to measure individual action, they realized they could help women more by focusing less on one specific disease and more on overall health. Since National Breast Cancer Awareness Month was already firmly established and linked to a health issue associated with women,<sup>519</sup> it made little sense to abandon it or even compete with it. Instead, in 2019 the American Cancer Society joined forces with the

American Heart Association, the American Diabetes Association, and nine other organizations to launch a collaborative campaign to rebrand October as Women's Health Month.<sup>520</sup> Based on its success, the next year they established March as Men's Health Month as well.<sup>521</sup>

At the same time, they changed their massively popular badges to tailor them to individuals based on key personal data. Today, the *Talking the Talk* badge is still fairly easy to obtain. It requires us to pass just a few quizzes about diet, exercise, and major health risks, and now we have our choice of hundreds of advocacy efforts.

As we have shared more information about our lives over the years, though, the coveted *Walking the Walk* badge has become harder to earn. Since so many health risks are related to obesity, we need to have badges that show we get regular exercise and have a healthy body fat ratio. Furthermore, any badges that indicate smoking, heavy drinking, harmful drug use, or consistently unhealthy eating habits disqualify us. Finally, we also need to get regular checkups and body scans that meet general medical recommendations for our age and genetic profile.<sup>522</sup> Those of us who don't follow these rigorous requirements for our health do it for the money, because this badge entitles us to huge discounts on health and life insurance.<sup>523</sup>

One of the largest October campaigns today asks women to take care of themselves before the rush of the holiday season. Through this program, participants pledge to friends and family members to earn the *Walking the Walk* badge, who in return promise to provide support and encouragement throughout the next year. The most popular March campaign pits small groups of men against each other, challenging them to see who can improve their

health the most and tracking their progress. (This spring cleaning for the body purposefully coincides with the popular NCAA Men's Division I Basketball Championship.)

One approach is more collaborative, the other more competitive, but both have let people use Facebook to see who in their social network could use a helping hand (or a friendly push). Neither has trivialized a cause by letting someone think he or she has actually done something to combat cancer just by sharing her bra color or posting a picture of his moustache.<sup>524</sup> Instead, campaigns built around these badges let people who really care about health use Facebook to lead by example.

It is by connecting intention with concrete action like this that *Badges* has made communication on Facebook more meaningful. In the beginning, the internet was a level playing field where everyone's opinion carried equal weight, but this did not reflect reality. *Badges* put verified proof of knowledge and experience right next to messages to help us find the ones worth listening to.

Even easy badges like *Talking the Talk* or those from *CheckYour.info* quizzes helped cut down on the mindless babbling that used to fill Facebook. When people started questioning how much individuals actually knew about what they were saying, uninformed opinions stopped getting applauded and instead were met with silence – or worse, backlash. On the other hand, opinions accompanied by relevant badges were well received. This combination of positive and negative reinforcement conditioned people to think before they spoke. Before they promoted a charity, told us how to vote, signed a petition, or even “liked” a band or a TV show, many took a moment to check if they had any evidence to show they had some idea what they



were talking about. If not, they either put in a little effort to get some, or if they didn't care enough, they kept quiet and moved on.

Either way, being a little more careful about what we said online made a huge difference. Researchers estimate it reduced the volume of social media chatter by 40 percent or more,<sup>525</sup> but that actually ended up helping Facebook, not hurting it. We may have said less overall, but each word meant more. As the signal-to-noise ratio of communication on Facebook improved, so did the perceived value of its primary product: the status update, which finally started reaching more of our friends again.

## THE RETURN OF (ACTUAL) SOCIAL NETWORKING

Furthermore, if Facebook's core product was the status update, then its core services were connecting people and providing information about them, both to users as well as advertisers. *Badges* made these services more valuable by increasing the quality of this data. The most obvious improvement that *Badges* introduced was third-party verification, which turned Facebook into the world's central clearinghouse for authentic personal information. Given the choice between verified and unverified data when looking for information about people, everyone naturally chose the former. Facebook became the best place to keep our online identities, which left us with few reasons to use competing social media services.

The company's biggest asset had always been its vast database, but before *Badges*, it had only reached a tiny fraction of its potential value. It's not as if this database lacked information. In fact, it was already filled with an unimaginable amount of personal data that we had

willingly shared about ourselves. However, this information was not very useful because it was highly disorganized.

For example, back in 2012, if Chloe were trying to decide whether or not to spend the next year studying abroad in Japan, she might have shared this in a status update, which would have only reached a fraction of her friends. If by chance her friend Liam read this, he probably would have skimmed right past to the next item on the page if he did not know anyone offhand who could help her make that decision. Alternatively, he could have asked his own social network if anyone knew someone who had studied in Japan, again via a status update that most people would never see. Or, given enough time and persistence, he could have meticulously combed through every one of his friends' Facebook pages until he happened upon a set of photos taken by Sofia, a work colleague, when she spent two semesters at Keio University in Tokyo ten years earlier.

Compare that to now, when Facebook's *New Connections* service notifies us when one of our friends wants to earn a badge that another of our friends has already earned. If the previous situation occurred today, Chloe would most likely add the *Study in Japan* badge to one of her collections of unearned badges, like "Under Consideration" or "Lifetime Goals." Liam would then get a notification that informs him that Sofia's *Keio University Exchange Student* badge suggests she has experience that could help Chloe. If Liam wants to introduce these two friends, he can send them a preformatted message with a tap of his finger, or he can write his own if he wants to be more involved.

Illustration: Default New Connection message

**New Connection**

To:

Message: I would like to introduce you to my friend, **Sofia Vogel**. Sofia earned the **Keio University Exchange Student** badge on May 25, 2029 and may be able to help you earn the **Study in Japan** badge.

Even before *Badges*, almost everything we could ever want to know about a person was right there on Facebook. It was just locked away in trillions of comments, status updates, and photo captions, which were too unwieldy to be very useful. But *Badges* fixed this by giving us a way to store the details of our lives in a more structured format.

Achievements made our personal experiences easy to verify, quantify, share, and compare. At first blush, it sounds like this merely turned us into a bunch of numbers for marketing purposes. While Facebook did make a fortune from this data by using it to deliver the most highly personalized promotions in the history of business, its profit did not come at our expense.

By default, Facebook's advertising system kept our data completely anonymous from advertisers. Plus, enabling companies to target their messages better let them make more sales while bothering us with fewer advertisements. Lower marketing expenses translated into not just higher profit margins for them, but also lower prices for us. The

net result for consumers was that we saw fewer irrelevant ads and received more special offers for goods and services we actually wanted.

But delivering better ads just scratched the surface of what Facebook was able to do with this treasure trove of data. Rather than dehumanizing us, *Badges* connected people in new ways, allowing us to share even more of our lives with each other.

The *New Connections* service, for example, steered our friends to introduce us to people who could help us, which was a fundamental goal of social networking long before we started using Facebook, or even computers for that matter. When we shared what we were working toward, from everyday badges like *Basic Knitting Skills* or *Fitness Boot Camp Cadet* to more serious goals like *30 Days Meth-Free* or *Living with Multiple Sclerosis*, Facebook told our friends if they knew someone that might be able to help without us ever having to ask. Even if we kept these details private, Facebook also let us join discussions among people with relevant badges, or else seek out people who volunteered to let others talk with them anonymously about their life experiences. Through a combination of friends-of-friends and helpful strangers, *Badges* turned Facebook into a universal support group that can provide assistance with everything that is important to us.<sup>526</sup>

## YARDSTICKS AND SUNGLASSES

Other companies have made applications that let us analyze our lives in unique and interesting ways using our badge collections. Some of the most famous apps that do this have been around for decades.

In 2016, *Glamour* teased a story with the cover line: “Is He Good in Bed? Find Out on Facebook!” Inside, sex experts presented a lengthy list of qualities that suggested a man would be a satisfying lover. Along with the article, the magazine also released *LoveScore*, a companion Facebook app that estimated a man’s lovemaking ability based on his badge collection, assigning one of five ratings ranging from “poor” to “excellent.”

When it was first introduced, *LoveScore* only worked on men and based its ratings on approximately 3,000 of the most popular badges. Shortly thereafter, *Glamour* expanded the system to rate women as well, and today it considers nearly 2 million different badges when it calculates a score. *Glamour* keeps its exact formula secret, but according to the most recent documentation:

*LoveScore searches a Facebook badge collection for evidence of physical strength, endurance, flexibility, dexterity, a sense of rhythm, a healthy diet, intelligence, a sense of humor, creativity, passion, patience, generosity, sensitivity, confidence, and strong communication skills.*

Those with low scores today often grumble, complaining that *LoveScore* is no more scientific than the antique love meters we saw at carnivals last century, but research has shown that members of both sexes find the system to be fairly precise when rating other people. However, even those who qualify for the *Excellent Lover* badge rarely display it, preferring instead to let interested parties hunt down the score on their own.

In fact, while *LoveScore* consistently ranks as one of the most popular Facebook apps, most users claim not to know or care about their own rating. Yet every time *Glamour*

tweaks its algorithms, there is a public outcry from the poor souls who get downgraded – although some take it in stride.

Illustration: Tweets in reaction to LoveScore algorithm update



Internal data shows people care more than they admit, because the vast majority of usage comes from people (mostly men) checking up on their own scores. This has made *LoveScore* particularly beneficial in the realm of disease prevention, because without a recent badge from an STD testing service like *im.tested.ru*, the app will not even issue a rating and will instead show a warning. This calls attention to vital information for people who are evaluating a potential sexual partner and gives those who are looking for a new partner a strong incentive to get tested frequently.<sup>527</sup> Over the years, dozens of copycat services like *D8R8R.com* have sprung up, but *LoveType* remains the original and one of the most popular. In fact, there is only one similar application that surpasses it.

In 2017, rival women’s magazine *Cosmopolitan* published a feature titled “What’s Your Type?” in which the editors listed two dozen male archetypes with names like The Musician, The Stockbroker, The Athlete, and The Casanova. Each description came with a list of badges that

this kind of man might have as well as examples of celebrities who fit the bill. The interactive version of the feature included a Facebook app called *Cosmo Sunglasses* that let “readers view the world through the eyes of *Cosmo*.” By using this app, users could see which archetypes their friends most closely matched based on their badge collections.

*Sunglasses* was a hit, but users complained that it wasn’t very accurate because the information the editors compiled was so limited. Swamped with thousands of suggestions, *Cosmo* decided to open the system up and let their readers decide how *Sunglasses* worked. From then on, any reader could propose new archetypes or vote on which were the most attractive, leading to new types like The Superdad, The Brooding Artist, The Adorable Geek, and The Handsome Older Gentleman.

Readers also determined how these types were defined. For example, anyone could add the *National Collegiate Table Tennis Champion* badge to The Athlete archetype, but how much it counted compared to, say, the *Minor League Baseball Triple-A All-Star* badge was determined by reader feedback gathered through voting, rating, and *Cosmo* quizzes. Men who were rated as an 80 percent match or higher for a particular archetype could earn a badge, but again, hardly any of them actually displayed it on their profiles. Just as with *LoveScore*, guys wanted to look good through *Sunglasses* without appearing to look like they were trying.

In 2018, *Cosmo* asked the men with the highest scores in America for each of the most popular archetypes to participate in a nationwide contest, and candidates’ profiles were published in a special feature article called

“Real, Sexy Men.” Readers then voted for their favorites, and the winner in each category received a badge and title like *Mr. Outdoors 2018*. The contest was a huge success and has since become an annual event that is now localized to over 100 different countries. In 2020, *Cosmo* editor-in-chief Kate White had this to say about *Sunglasses*:

*At first it was just a fun angle on men... no deeper than the advice you'd get from a talk show. What it has become, though, is so much more exciting. Now, Sunglasses is a data-driven model of the female collective consciousness. It represents our shared beliefs and values, and these go far beyond just what we think is sexy.*

*It is also refreshing to be able to give men positive role models who are not celebrities and show women that there are great guys all around them, well within their reach.*

Former editor-in-chief Helen Gurley Brown added:

*Women have suffered through the same old beauty pageants for decades in which our most treasured ability was wearing a swimsuit.*

*Now that we have banded together to come up with a pageant of our own, is it any surprise that it is smarter and asks for a little more substance?*

Although the applications that revolve around sex and dating are the most popular, companies have made plenty of other useful tools. Brokerage firm Charles Schwab, for example, created *uFolio*, a free Facebook app that lets us analyze our lives using information gleaned from our badges. These are presented in the style of corporate annual reports, but in place of earnings and losses, we choose data points based on our interests and activities.



*uFolio* was designed with an open architecture that allows third parties to create modules that we can add to our reports. Golf enthusiasts might include a table designed by Callaway Golf with line items like “Number of courses played, by year” or “Lifetime birdies.” The ecologically conscious might put in graphs from the Sierra Club that compare their activity to national averages, like the total miles traveled by bicycle or the pounds of aluminum recycled annually. Topline reports that show how many hours we spend exercising, watching TV, or volunteering have helped us learn more about what we are doing with our lives. Even seemingly inconsequential data like the number of new restaurants we have tried in the last year become more profound when the total is zero, since we often do not notice subtle changes in our own behavior.

Along those lines, referral service 1-800-DENTIST made an application called *Find Your Smile* that analyzes our interests as well as past and current behavior patterns to make educated guesses at what will make us happy. If we have several old literary badges but have not earned any lately, for instance, it might suggest reading a new book. *Find Your Smile* may not dig deep into our psyches, but it nevertheless helps us identify ruts before we fall into them.

## **BEYOND SOCIAL NETWORKING**

Some save us time, some save us money, some help us meet new people, and some help us make our dreams come true. Our lives have been enhanced by countless useful applications made possible because *Badges* gave us a way to share verified personal information in a structured format. Storing our data with Facebook made it more valuable, which was a good thing for the company because

there was no shortage of other competitors trying to take its place.

When *Badges* was introduced, some of our photos were on Facebook, but we also shared others on Flickr and Twitter. And Instagram. And Tumblr. And Snapfish, Shutterfly, Imgur, Photobucket, deviantART, and Picasa. Like Facebook, each of these services offered free media storage along with varying degrees of social functions. The same went for our videos and YouTube. (And Vimeo, DailyMotion, Blip, Veoh, SocialCam, Viddy...)

Our digital selves were scattered across the internet. Our professional history was on LinkedIn while our hobbies were on Pinterest. Our tastes in books, music, movies, and food were on Amazon, Spotify, Netflix, and Yelp, respectively.

Many had already tried to become the center of the digital universe long before Facebook came along. Microsoft alone made five major attempts in the 1990s and 2000s to create a global online identification system, but none of their efforts really caught on.<sup>528</sup> Facebook's first step in this direction was very similar: By lending out its registration system,<sup>529</sup> it let people log in to other websites with their Facebook accounts.

Facebook expanded this concept when it made *Identity*, which kept our personal data secure and let us quickly access it by logging in anywhere, not just online. Later it released *Commerce*, which gave us the same level of control over our financial information as well. These radical new developments solved serious problems, however they were viable only after *Badges* gave us good reasons to route just about everything we did through

Facebook. And each new feature further secured Facebook's future because they all improved the company's primary business.

At each step of the way, Facebook earned our permission to learn more about us by using what we shared to make our lives more enjoyable and convenient. With enough data, when we visited a restaurant, a dozen or more Facebook apps might have sprung into action automatically, notifying the chef of our food allergies listed in *Identity*, highlighting which dishes on the menu screen would help us reach the health goals we were working toward in *Badges*, or drawing data from *Commerce* to let us know that the pinot grigio we enjoyed so much at that Tuscan café three years earlier just happened to be on the wine list.

Of course, all this information helped Facebook's bottom line, too. The more Facebook knew about us, the better it could deliver advertising, which was actually good for everyone. Companies did not want to waste their money delivering irrelevant messages any more than we wanted to waste our time listening to them. Other commerce systems delivered ads based just on our web browsing history and past purchases, and could not even tell what we bought for ourselves and what we bought for others. But Facebook revolved around us as individuals, and to its system, financial transactions were just one of many types of personal data. Instead of leeching off them, it added them to information that would never show up in a purchase history, like that we knew sign language, or participated in community theater, or dreamed of visiting the Galápagos Islands. Plus, unlike so many data clearinghouses of the past, Facebook never shared our personal information without our consent. Despite the worst fears of privacy

advocates, marketers' most nefarious plans for this information typically consisted of checking to make sure we would want to hear from them, then making special offers that interested us. Eventually, advertising through Facebook transformed from an annoying, yet necessary evil into messages that don't really bother us, and that we actually frequently welcome.

*Badges*, and later *Identity* and *Commerce*, enhanced our connections with the people, activities, and companies that were important to us, giving us more reasons to share our everyday interactions with Facebook. Starting with *Badges*, Facebook stopped just making minor tweaks to what it was already doing. Instead, it acted like the market leader it was by developing radically new features that extended Facebook far beyond its original scope, and each one significantly improved its primary source of revenue: advertising. Forging ahead like this is why Facebook is still around today, unlike so many other social media companies, all but forgotten to history after they crumbled just as quickly as they grew.

## AUTHOR'S NOTE: THANK YOU

Thank you very much for taking the time to read this book; I hope you enjoyed it. If you did, you may want to read the other books in the *Tales from 2040* series included in this collection:

Jump to [\*Tale #001: How Apple helped the Tea Party and Occupy movements fix politics\*](#)

Jump to [\*Tale #002: How Lady Gaga fought crime, AIDS, and abortion rates\*](#)

Also, if you feel the ideas in this book are worth sharing, here are some ways you can get involved:

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You can share this book with the following link:

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You are also invited to discuss your vision of a brighter future on the 2040 Network forum:

<http://2040.net/work>

There, the 2040 Network is forming to discuss these books and develop new strategies for charitable capitalism. I hope to see you there, and I welcome your questions, comments, criticism, and creative ideas.

# FUTURE TALES FROM 2040

The working titles for the next books planned in the *Tales from 2040* series are:

*How Google revolutionized the food industry*

*How Amazon made manufacturing greener*

*How Wal-Mart saved American health care*

*How Microsoft fought poverty and made us all smarter*

If you feel the *Tales from 2040* series is socially beneficial, find out how you can contribute to new books and help us create a brighter future by visiting:

<http://2040.net>



## ABOUT THE AUTHOR

Born in 1979, Christopher Cardinal grew up in rural Nevada and now lives in San Diego, where he works at a marketing and technology consulting firm he started in 1993.

## ENDNOTES

1. This assumes that after the release of Identity, Facebook lifted the requirement that users be 13 years of age and introduced parental controls over communication.
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  23. Shayndi Raice. (2012) “Facebook Sets Historic IPO.” The Wall Street Journal. Feb. 2, 2012. [Link](#)
  24. The Nielsen Company. (2012) “State of the Media: The Social Media Report Q3 2011.” The Nielsen Company. New York, NY.
  25. Roger Cheng. (2012) “Facebook Files to Go Public, Plans to Raise \$5B.” CNET. Feb. 1, 2012. [Link](#)
  26. Lars Backstrom, Paolo Boldi, Marco Rosa, Johan Ugander, Sebastiano Vigna. (2012) “Four Degrees of Separation.” Proceedings of the 3rd Annual ACM Web Science Conference, Jun. 22-24, 2012. pp. 45-54.
  27. Facebook. (2012) “Facebook, Inc.: Amendment No. 4 to Form S-1.” United States Securities and Exchange Commission. Washington, DC. Apr. 23, 2012.
  28. “We had 845 million monthly active users (MAUs) as of December 31, 2011 ... We estimate that false or duplicate accounts may have represented approximately 5-6% of our MAUs as of December 31, 2011.”



Facebook. (2012) “Facebook, Inc.: Amendment No. 2 to Form S-1.” United States Securities and Exchange Commission. Washington, DC. Mar. 7, 2012.

29. FarmVille was the most popular game on Facebook between August 2009 and December 2010.

Appdata. (2011) Custom report generated at: [Link](#)

Adam Hadhazy. (2011) “CityVille Surpasses FarmVille as Most Popular Game on Facebook.” TechNewsDaily via MSNBC. Mar. 14, 2011. [Link](#)

30. “In 2011 and the first quarter of 2012, Zynga directly accounted for approximately 12% and 11%, respectively, of our revenue, which was comprised of revenue derived from Payments processing fees related to Zynga’s sales of virtual goods and from direct advertising purchased by Zynga. Additionally, Zynga’s apps generate pages on which we display ads from other advertisers; for 2011 and the first quarter of 2012, we estimate that an additional approximately 7% and 4%, respectively, of our revenue was generated from the display of these ads.”

Facebook. (2012) “Facebook, Inc.: Amendment No. 4 to Form S-1.” United States Securities and Exchange Commission. Washington, DC. Apr. 23, 2012.

Brittany Darwell. (2012) “Facebook Estimates 4 Percent of Q1 Revenue Came from Ads on Zynga App Pages, 11 Percent from Zynga Directly.”

InsideFacebook. Apr. 23, 2012. [Link](#)

31. Facebook. (2012) “Facebook, Inc.: Form S-1.” United States Securities and Exchange Commission. Washington, DC. Feb. 1, 2012.
32. Zynga. (2012) “Zynga Unveils New Platform for Play.” Press Release. Mar. 2, 2012. [Link](#)
33. “Growth in use of Facebook through our mobile products, where our ability to monetize is unproven, as a substitute for use on personal computers may negatively affect our revenue and financial results...Our advertising revenue could be adversely affected by a number of other factors, including...increased user access to and engagement with Facebook through our mobile products, where we do not currently directly generate meaningful revenue, particularly to the extent that mobile engagement is substituted for engagement with Facebook on personal computers where we monetize usage by displaying ads and other commercial content;”

Facebook. (2012) “Facebook, Inc.: Amendment No. 2 to Form S-1.” United States Securities and Exchange Commission. Washington, DC. Mar. 7, 2012.

34. Alexandra Chang. (2012) “Report: Smartphones, Not Computers, Drive Most Facebook Use.” CNN. May 8, 2012. [Link](#)
35. Sharon Terlep, Suzanne Vranica, Shayndi Raice. (2012) “GM Says Facebook Ads Don’t Pay Off.” The Wall Street Journal. May 16, 2012. [Link](#)
36. Mark Zuckerberg. (2012) Untitled post. Facebook. Apr. 9, 2012. [Link](#)
37. Dan Lyons. (2012) “Instagram App Deepens Class Warfare Between Apple and Android Smartphones.” The Daily Beast. Apr. 6, 2012. [Link](#)

38. Amanda Petrusich. (2012) “Instagram, the Nostalgia of Now and Reckoning the Future.” BuzzFeed. Apr. 24, 2012. [Link](#)
39. Nicole Carter. (2012) “3 Simple Reasons Instagram Is Worth \$1 Billion to Facebook.” Inc. Apr. 10, 2012. [Link](#)
40. The price at the time the deal was made. By the time it was finalized, the value of the stock portion of the purchase agreement had fallen, resulting in an actual price of approximately \$715 million.  
Addy Dugdale. (2012) “Facebook Reveals Final Price for Instagram.” Fast Company. Oct. 25, 2012. [Link](#)
41. Facebook made exactly \$1.000 billion in profit in 2011.  
Facebook. (2012) “Facebook, Inc.: Amendment No. 4 to Form S-1.” United States Securities and Exchange Commission. Washington, DC. Apr. 23, 2012.
42. Steven Musil. (2012) “Zuckerberg Did \$1 Billion Instagram Deal on His Own.” CNET. Apr. 17, 2012. [Link](#)
43. Shayndi Raice, Spencer Ante, Emily Glazer. (2012) “In Facebook Deal, Board Was All but Out of Picture.” The Wall Street Journal. Apr. 18, 2012. [Link](#)
44. Ellen McGirt. (2007) “Facebook’s Mark Zuckerberg: Hacker. Dropout. CEO.” Fast Company. May 1, 2007. [Link](#)
45. MG Siegler. (2011) “Behold: Facebook’s Secret Photo Sharing App.” TechCrunch. Jun. 15, 2011. [Link](#)
46. In his post announcing the acquisition, Zuckerberg said, “...providing the best photo sharing experience is one reason why so many people love Facebook and we knew it would be worth bringing these two companies together.”  
Mark Zuckerberg. (2012) Untitled post. Facebook. Apr. 9, 2012. [Link](#)
47. “On average more than 300 million photos per day were uploaded to Facebook in the three months ended March 31, 2012.”  
Facebook. (2012) “Facebook, Inc.: Amendment No. 4 to Form S-1.” United States Securities and Exchange Commission. Washington, DC. Apr. 23, 2012.
48. Shayndi Raice, Spencer Ante, Emily Glazer. (2012) “In Facebook Deal, Board Was All But Out of Picture.” The Wall Street Journal. Apr. 18, 2012. [Link](#)
49. Jessica Vascellaro. (2010) “Facebook CEO in No Rush To ‘Friend’ Wall Street.” The Wall Street Journal. Mar. 3, 2010. [Link](#)
50. Randall Smith, Shayndi Raice. (2012) “Facebook’s Zuckerberg Skips Analyst Meeting.” The Wall Street Journal. Mar. 20, 2012. [Link](#)  
Some were even concerned that Zuckerberg’s involvement in the Instagram purchase could delay the IPO.  
Kate Kelly. (2012) “Facebook IPO Could Be Delayed by Deals, Distractions.” CNBC. Apr. 24, 2012. [Link](#)

51. Jeff Cox. (2012) “Facebook IPO: Big Volume, but Little to Show for It.” CNBC. May 18, 2012. [Link](#)
52. Shayndi Raice, Ryan DeZember, Jacob Bunge. (2012) “Facebook’s IPO Sputters.” The Wall Street Journal. May 18, 2012. [Link](#)
53. Sarah McBride, Mary Slosson. (2012) “Zuckerberg Weds Longtime Girlfriend, No Word on Prenup.” Reuters. May 20, 2012. [Link](#)
54. Mark Zuckerberg. (2012) “Mark Zuckerberg.” Facebook. May 20, 2012. [Link](#)
55. Photo Credit: Noah Kalina.  
 Although this photo was seen by millions and published in numerous articles, the photographer was all but uncredited.  
 Noreen Malone. (2012) “Meet Noah Kalina, the Zuckerberg Wedding Photographer and Former Viral-Video Sensation.” New York. May 22, 2012. [Link](#)
56. Possibly the most reported piece of gossip from Zuckerberg and Chan’s honeymoon was that Zuckerberg did not leave a tip at an Italian restaurant. This article is one of the few to note that, as opposed to America, tipping is not expected in Italy.  
 Salvador Rodriguez. (2012) “Facebook’s Mark Zuckerberg Skips Tip on Italy Honeymoon, Reports Say.” Los Angeles Times. May 30, 2012. [Link](#)
57. Max Chafkin. (2009) “Friendster Sells for \$100 Million.” Inc. Dec. 10, 2009. [Link](#)
58. Joseph Walker, Spencer Ante. (2012) “Once a Social Media Star, Digg Sells for \$500,000.” The Wall Street Journal. Jul. 13, 2012. [Link](#)
59. Erik Sherman. (2011) “Will Zynga’s IPO Produce Another Apple?” CBS News. Dec. 13, 2011. [Link](#)
60. Mark Mills. (2011) “The Good News behind the Zynga IPO and What It Says about the New Economy.” Forbes. Dec. 18, 2011. [Link](#)
61. Yahoo! Finance. (2012) “Zynga, Inc. (ZNGA) Historical Prices.” Jul. 27, 2012. [Link](#)  
 Gerry Shih. (2012) “Zynga Slashes Outlook, Denting Its Stock and Facebook’s.” Reuters. Jul. 26, 2012. [Link](#)
62. Brian Womack. (2012) “Facebook Stock Plunge Slashes \$34 Billion of Market Value.” Forbes. Jul. 27, 2012. [Link](#)
63. Business Wire. (2012) “Law Firm of Wohl & Fruchter LLP Announces Investigation of Zynga, Inc.” Bloomberg. Jul. 27, 2012. [Link](#)  
 Business Wire. (2012) “Shareholder Alert: The Law Firm of Levi & Korsinsky, LLP Launches an Investigation of Zynga, Inc. Concerning Possible Violations.” Bloomberg. Jul. 27, 2012. [Link](#)  
 Globe Newswire. (2012) “The Rosen Law Firm Announces Investigation of Securities Claims Against Zynga, Inc. -- ZNGA.” Jul. 27, 2012. [Link](#)

PR Newswire. (2012) “Faruqi & Faruqi, LLP Encourages Investors Who Suffered Substantial Losses of \$100,000 Investing in Zynga, Inc. to Contact the Firm.” Jul. 27, 2012. [Link](#)

64. Facebook. (2012) “Facebook, Inc.: Amendment No. 4 to Form S-1.” United States Securities and Exchange Commission. Washington, DC. Apr. 23, 2012.

65. Donna Tam. (2012) “Facebook Stock Drops on News of Decline in User Base.” CNET. Jul. 17, 2011. [Link](#)

66. Approximately 83 million vs. a previous estimate of 42.3 – 50.7 million.

“We had 955 million monthly active users (MAUs) as of June 30, 2012... We estimate that ‘duplicate’ accounts (an account that a user maintains in addition to his or her principal account) may have represented approximately 4.8% of our worldwide MAUs as of June 30, 2012... As of June 30, 2012, we estimate user-misclassified accounts may have represented approximately 2.4% of our worldwide MAUs and undesirable accounts may have represented approximately 1.5% of our worldwide MAUs.”

Facebook. (2012) “Facebook, Inc.: Form 10-Q for the Quarterly Period Ended June 30, 2012.” United States Securities and Exchange Commission. Washington, DC.

Previous estimate from:

Facebook. (2012) “Facebook, Inc.: Amendment No. 2 to Form S-1.” United States Securities and Exchange Commission. Washington, DC. Mar. 7, 2012.

67. It is important to note that the methodology used by this company is not revealed, so it is impossible to evaluate the claim.

Emil Protalinski. (2012) “Firm Ditches Facebook for Twitter, Claims Clicks Are Bots.” CNET. Jul. 30, 2012. [Link](#)

68. Yahoo! Finance. (2012) “Facebook, Inc. (FB) Historical Prices.” Aug. 1, 2012. [Link](#)

69. As compared to its price-to-earnings ratio.

Brian Womack. (2012) “Facebook Stock Plunge Slashes \$34 Billion of Market Value.” Forbes. Jul. 27, 2012. [Link](#)

70. Caveat: This research relies on self-reported motivations for behavior, which are often poor indicators of actual motivation, and also used a limited sample, but the findings are supported by other research as well as many behavioral and usage indicators.

Daniel Hunt, David Atkin, Archana Krishnan. (2012) “The Influence of Computer-Mediated Communication Apprehension on Motives for Facebook Use.” *Journal of Broadcasting & Electronic Media*. Vol. 56, No. 2, pp. 187-202.

71. Brian Stelter, Tanzina Vega. (2011) “Ad Money Reliably Goes to Television.” *The New York Times*. Aug. 7, 2011. [Link](#)

72. There are many different ways of measuring time spent on websites and many different ways of making comparisons (such as including mobile usage or comparing browser-only usage, or comparing Facebook to just Google or to all Google-owned sites, like YouTube). Nevertheless, many recently reported measurements say people spend around two to four times as much time on Facebook.

The Nielsen Company. (2012) “May 2012 – Top U.S. Web Brands and News Websites.” Press Release. Jun. 22, 2012. [Link](#)

Mark Gongloff. (2011) “Facebook Sucks Up a Ridiculously Huge and Growing Share of Our Time Wasted Online.” The Wall Street Journal. Sep. 26, 2011. [Link](#)

73. Agustino Fontevecchia. (2012) “The Two Things Holding Facebook Back.” Forbes. May 18, 2012. [Link](#)
74. John Dobosz. (2012) “Facebook No Bargain Compared to Google at IPO.” Forbes. May 17, 2012. [Link](#)
75. Agustino Fontevecchia. (2012) “The Two Things Holding Facebook Back.” Forbes. May 18, 2012. [Link](#)
76. Joanna Brenner. (2012) “Pew Internet: Social Networking.” Pew Internet & American Life Project. May 31, 2012. [Link](#)
- Arbitron/Edison Research. (2011) “The Infinite Dial 2011: Navigating Digital Platforms.” Arbitron. Columbia, MD.
77. In Facebook’s IPO registration statement, the company said it needed to deliver “content that is interesting, useful, and relevant” and “create new products that sustain or increase the value of [its] ads and other commercial content.”
- Facebook. (2012) “Facebook, Inc.: Amendment No. 6 to Form S-1.” United States Securities and Exchange Commission. Washington, DC. May 9, 2012.
78. Albert Einstein, Alice Calaprice (Ed.) (2010) “The Ultimate Quotable Einstein.” Princeton University Press. Princeton, NJ.
- Although this book attributes the quote to Rita Mae Brown in her 1983 book *Sudden Death*, a similar saying appeared in a 1981 *Narcotics Anonymous* publication and it may be even older.
- Literature Sub-Committee of Narcotics Anonymous. (1981) “Basic Text Approval Form.” Narcotics Anonymous. Van Nuys, CA.
79. All three of these articles specifically mention FarmVille updates as the first example of annoyances on Facebook.
- Michelle Kessler. (2010) “Facebook to Make Games Less Annoying, More Engaging.” USA Today. Sep. 22, 2010. [Link](#)
- Kathy Kristof. (2010) “3 Most Annoying Facebook Habits That Bug Your Friends.” CBS News. Sep. 23, 2010. [Link](#)

Ian Paul. (2012) “The 10 Most Annoying Facebook Features.” PCWorld. Jun. 18, 2012. [Link](#)

80. Jared Morgenstern. (2010) “Making Games on Facebook Better.” Facebook. Sep. 21, 2010. [Link](#)
81. Technically, this scholarship is awarded by the Rhodes Trust, but the University would probably award badges for all scholarships, regardless of the source.
82. Coins image © alexfiodorov - Fotolia.com.
83. Kukkiwon. (2011) “Rules for Promotion Test.” World Taekwondo Headquarters. Seoul, South Korea.
84. Nike. (2012) “Nike+ Products.” Nike.com. Jun. 11, 2012. [Link](#)
85. Foursquare. (2012) “About foursquare.” Foursquare.com Jun. 11, 2012. [Link](#)
86. Doghouse image © 2011 TheDesignCrew.
87. Right now, the closest buzzword is “gamification.”  
 Patrick Salyer. (2011) “Gamification: Why Sites Need To Simplify Social.” Fast Company. Jul. 20, 2011. [Link](#)  
 Gartner. (2011) “Gartner Says By 2015, More Than 50 Percent of Organizations That Manage Innovation Processes Will Gamify Those Processes.” Press Release. Apr. 12, 2011. [Link](#)
88. European Brand Institute. (2011) “Top 100 Brand Ranking – Brand Corporations Worldwide.” Oct. 2011. [Link](#)
89. Expedia. (2012) “Expedia, Inc.: Form 10-K, Annual Report for the fiscal year ended December 31, 2011.” United States Securities and Exchange Commission. Washington, DC. Mar. 12, 2012.
90. Big Texan Steak Ranch. (2012) “Free 72 oz. Steak Dinner Rules.” BigTexan.com. Mar. 13, 2012. [Link](#)
91. Clear Channel Communications. (2012) “CC Media Holdings, Clear Channel Communications and Clear Channel Outdoor Holdings Set Date for Second Quarter 2012 Earnings Teleconference.” Press Release. Jul. 20, 2012. [Link](#)
92. The American Red Cross was founded in 1881.  
 Patrick Gilbo. (1981) “The American Red Cross: The First Century.” HarperCollins. New York, NY.
93. This is an example of the endowment effect, a psychological phenomenon that explains why people are extremely reluctant – to the point of irrationality – to give something up once they have acquired it.  
 Daniel Kahneman, Jack Knetsch Richard Thaler. (1991) “Anomalies: The Endowment Effect, Loss Aversion, and Status Quo Bias.” The Journal of Economic Perspectives. Vol. 5, No. 1, pp. 193-206.

94. Ginny Mies. (2010) “Should You Not Donate by Text Message?” PC World. Jun. 1, 2010. [Link](#)

95. Activision Blizzard. (2011) “Form 10-K Annual Report.” United States Securities and Exchange Commission. Washington, DC.

Also:

Activision Blizzard. (2011) “Activision Blizzard Second Quarter Calendar 2011 Results Conference Call.” Aug. 3, 2011.

Guinness World Records. (2009) “Guinness World Records Gamer’s Edition.” Time Home Entertainment. New York, NY.

Blizzard Entertainment. (2008) “World of Warcraft subscriber base reaches 11.5 million worldwide.” Press Release. Nov. 21, 2008. [Link](#)

96. Average number of achievements for other video games is based on an analysis of all games listed at:

PS3Trophies.org. (2010) “Trophies.” Jul. 23, 2010. [Link](#)

Xbox360Achievements.org. (2010) “Achievements.” Jul. 23, 2010. [Link](#)

The number of achievements in World of Warcraft based on:

Wowhead. (2012) “Achievements – World of Warcraft.” Wowhead.com. May 16, 2012. [Link](#)

97. John Hafner, Jeremy Sturgell, David Matlock, Elizabeth Bockewitz, Lisa Barker. (2012) “‘Stayin’ Alive’: A Novel Mental Metronome to Maintain Compression Rates in Simulated Cardiac Arrests.” *The Journal of Emergency Medicine*. Vol. 43, No. 5, pp. e373-e377.

Earlier study:

D. Matlock, J. Hafner Jr., E. Bockewitz, L. Barker, J. Dewar. (2008) “‘Stayin’ Alive’: A Pilot Study to Test the Effectiveness of a Novel Mental Metronome in Maintaining Appropriate Compression Rates in Simulated Cardiac Arrest Scenarios.” *Annals of Emergency Medicine*. Vol. 52, No. 4, pp. S67-68.

Since newborns require faster chest compressions, some have suggested using another disco hit, Gloria Gaynor’s “I Will Survive” for neonatal CPR.

Vincent Rigo, Jacques Rigo. (2009) “Newborns Need Another Tune: ‘I Will Survive’ Sets Neonatal Resuscitation Rhythm.” *Annals of Emergency Medicine*. Vol. 53, No. 6, pp. 837.

98. Blizzard split the proceeds evenly between themselves and the Make-a-Wish Foundation.

Blizzard Entertainment. (2010) “The Make-A-Wish Foundation receives \$1.1 million donation from Blizzard Entertainment.” Press Release. Feb. 16, 2010. [Link](#)

Interestingly, Zynga had a similar program that turned into a public relations nightmare. Zynga first created a program called “Sweet Seeds for Haiti” in FarmVille, its most popular online game. They sold virtual sweet

potato seeds for a limited time and donated half the proceeds to Haiti to promote sustainable farming. Later, when Haiti was struck by an earthquake, Zynga created a new promotion, selling white corn seeds, this time with all proceeds going to help disaster victims. A short time later, a Brazilian magazine, confusing the two different fundraising initiatives, reported that Zynga had misled the public and only given half of the money collected to Haiti, even though both promotions were very clearly advertised. In an unfortunate twist of social networking at its worst, the story spread quickly, and although several news outlets later printed retractions, the damage was already done.

Mathew Ingram. (2010) “Zynga Gets Unfairly Slammed Over Haiti Donations.” GigaOM. Mar. 4, 2010. [Link](#)

99. Alexander Sliwinski. (2011) “GTA IV Surpasses 22M Shipped, Franchise at 114M Total.” Joystiq. Sep. 16, 2011. [Link](#)
100. Guinness World Records. (2009) “Guinness World Records Gamer’s Edition.” Time Home Entertainment. New York, NY.
101. Real person, fictional quotes.
102. Amanda Lenhart, Joseph Kahne, Ellen Middaugh, Alexandra Macgill, Chris Evans, Jessica Vitak. (2008) “Teens, Video Games and Civics.” Pew Research Center. Washington, DC. [Link](#)
103. For example, in 2012, after fans did not like the end to a popular game, they raised over \$60,000 (which they donated to charity) in an effort to convince the game developer to change it.

Ray Muzyka. (2012) “To Mass Effect 3 Players, from Dr. Ray Muzyka, Co-Founder of BioWare.” Bioware.com. Mar. 21, 2012. [Link](#)

ChipIn. (2012) “Retake Mass Effect – Child’s Play.” ChipIn.com Mar. 23, 2012. [Link](#)

Also, about 8% of those ages 8 to 18 played “pathologically.”

Douglas Gentile. (2009) “Pathological Video-Game Use Among Youth Ages 8 to 18: A National Study.” Psychological Science. Vol. 20, No. 5, pp. 594-602.

The link between online game addiction and the Millennials can be partially explained by their high levels of narcissism, since these games reinforce narcissistic needs.

Eun Joo Kim, Kee Namkoong, Taeyun Ku, Se Joo Kim. (2008) “The Relationship Between Online Game Addiction and Aggression, Self-Control and Narcissistic Personality Traits.” European Psychiatry. Vol. 23, No. 3, pp. 212-218.

104. Nick Shore. (2011) “Millennials Are Playing with You.” Harvard Business Review. Dec. 12, 2011. [Link](#)
105. Custom keychain created by Zazzle, Inc. [Link](#)



106. At first, some would require external sensors, until demand drove manufacturers to build them into all devices.
107. Coupawz. (2012) “About Us.” Coupawz.com. Jun. 22, 2012. [Link](#)  
 Jewpon. (2012) “About.” Jewpon.com. Jun. 22, 2012. [Link](#)  
 Buys for Brides. (2012) “About Us.” BuysForBrides.com. Jun. 22, 2012. [Link](#)
108. Kris Ashton. (2011) “The Big List of Daily Deal Aggregators.” Daily Deal Media. Jul. 25, 2011. [Link](#)  
 Chadwick Matlin. (2011) “482 Groupon Clones, One New Business Model.” Fortune. Jul. 27, 2011. [Link](#)
109. Alistair Barr. (2011) “Facebook Ending Deals Product after Four-Month Test.” Reuters. Aug. 26, 2011. [Link](#)
110. Aaron Smith, Janna Quitney Anderson, Lee Rainie. (2012) “The Future of Money: Smartphone Swiping in the Mobile Age.” Pew Research Center. Washington, DC.  
 Also, in a survey of educated Millennials, more said they could least afford to lose their laptop, smartphone, or tablet on a trip compared to those who said their wallet was most important.  
 Cisco Systems. (2011) “2011 Cisco Connected World Technology Report.” Cisco Systems. San Jose, CA.
111. Lance Whitney. (2011) “NFC Mobile Payments Could Hit \$50 Billion by 2014.” CNET. Jun. 8, 2011. [Link](#)
112. Christie Smythe, Dakin Campbell. “Visa, MasterCard Settle Merchants’ Swipe-Fee Lawsuit.” Bloomberg. Jul. 14, 2012. [Link](#)
113. Robin Sidel. (2012) “Retailers Join Payment Chase.” The Wall Street Journal. Mar. 2, 2012. [Link](#)
114. Kelly Clay. (2012) “Starbucks Introduces Mobile Payments for Canada and UK.” Forbes. Jul. 11, 2012. [Link](#)
115. This is not a shot at Groupon. (Even though Groupon had lost about half its value within six months after its IPO when its accounting practices were questioned.)  
 Danielle Kucera. (2012) “Groupon Loses Half of Value Since IPO on Accounting Woes.” Bloomberg. May 4, 2012. [Link](#)  
 If anything, it would be a reference to Instagram, although it could apply to hundreds of social media companies.
116. One example (of many):  
 Joseph Galante, Joel Rosenblatt. (2011) “Google Sued by PayPal Over Claims It Stole Trade Secrets.” Bloomberg. May 27, 2011. [Link](#)
117. Kit Eaton. (2011) “In the Messy NFC Battle, Consumers Are the Biggest Losers.” Fast Company. Dec. 14, 2011. [Link](#)

Later it was revealed that both Apple and Google spent more in 2011 on patent lawsuits and patent purchases than they did on research and development.

Charles Duhigg, Steve Lohr. (2012) “The Patent, Used as a Sword.” The New York Times. Oct. 7, 2012. [Link](#)

118. Amir Efrati, Anton Troianovski. (2011) “War Over the Digital Wallet.” The Wall Street Journal. Dec. 7, 2011. [Link](#)  
Kit Eaton. (2011) “Verizon, AmEx, and the Race to Control the (Possible) Billion-Dollar Mobile Payments Industry.” Fast Company. Aug. 1, 2011. [Link](#)
119. SBA Office of Advocacy. (2011) “Frequently Asked Questions.” US Small Business Administration. Washington, DC.
120. Chris Matyszczyk. (2012) “This New Facebook Phone: Why Would Anyone Want One?” CNET. May 28, 2012. [Link](#)  
Mathew Ingram. (2012) “A Facebook Phone: Ambitious Leap or Fatal Mistake?” Bloomberg BusinessWeek. May 29, 2012. [Link](#)  
Farhad Manjoo. (2012) “Who Wants a Terrible Facebook Phone?” Slate. May 29, 2012. [Link](#)
121. The word “most” was added when Google announced it had moved its payment data to the cloud.  
Sarah Kessler. (2012) “Google Wallet Uses the Cloud to Support All Credit Cards.” Fast Company. Aug. 1, 2012. [Link](#)
122. Andy Greenberg. (2011) “Meet Comex, the 19-Year-Old iPhone Uber-Hacker Who Keeps Outsmarting Apple.” Forbes. Aug. 1, 2011. [Link](#)  
Note: Shortly after this article was published, Apple hired Allegra (Comex) as an intern, an arrangement that lasted almost a year.  
Andy Greenberg. (2012) “iPhone Uber-Hacker Comex Is Out at Apple.” Forbes. Oct. 18, 2012. [Link](#)
123. Chris Dannen. (2011) “NFC’s Great, but Rumors of Credit Cards’ Death Are Greatly Exaggerated.” Fast Company. Mar. 10, 2011. [Link](#)
124. Roy Want. (2006) “An Introduction to RFID Technology.” Pervasive Computing. Vol. 5, No. 1, pp. 25-33.
125. Kit Eaton. (2011) “NFC’s Stuttering Start.” Fast Company. Dec. 28, 2011. [Link](#)
126. CTIA. (2011) “CTIA Semi-Annual Wireless Industry Survey.” CTIA. Washington, DC.
127. Staff Reporter. (2012) “Two Thirds of New Mobile Buyers Now Opting for Smartphones.” The Nielsen Company. Jul. 12, 2012. [Link](#)
128. Marguerite Reardon. (2012) “Is NFC killing Google Wallet?” CNET. May 25, 2012. [Link](#)

129. Google later changed their system to store credit card information in the cloud to allow other credit cards, but the other restrictions still applied.  
Google. (2012) “Use Any Credit or Debit Card with Google Wallet.” Official Android Blog. Aug. 1, 2012. [Link](#)
130. Comparing groups that were “extremely” or “very” concerned to those who were “somewhat” or “not” concerned.  
Lieberman Research Group. (2011) “Unisys Security Index: US.” Unisys. Blue Bell, PA.
131. This study found 96% of Americans objected to mobile devices sharing information with stores when they visit without making a purchase. (79% definitely would not allow it, 17% probably would not allow it.) The response rate increased when asking about situations in which they actually made a purchase, but was still low. It also found that 74% of respondents were either “not too likely” or “not at all likely” to adopt mobile payment systems.  
Chris Jay Hoofnagle, Jennifer Urban, Su Li. (2012) “Mobile Payments: Consumer Benefits & New Privacy Concerns.” Social Science Research Network. Working Paper #2045580. [Link](#)
132. Santiago Budría Rodríguez, Javier Díaz-Giménez, Vincenzo Quadrini, José-Víctor Ríos-Rull. (2002) “Updated Facts on the U.S. Distributions of Earnings, Income, and Wealth.” Federal Reserve Bank of Minneapolis Quarterly Review. Vol. 26, No. 3, pp. 2-35.  
Arthur Kennickell. (2003) “A Rolling Tide: Changes in the Distribution of Wealth in the U.S., 1989-2001.” FEDS Working Paper No. 2003-24; Levy Economics Institute Working Paper No. 393. Social Science Research Network. Working Paper #427720. [Link](#)
133. Juniper Research. (2012) “NFC Mobile Payments & Retail Marketing: Business Models & Forecasts 2012-2017.” Juniper Research. Hampshire, England.
134. Rachel King. (2012) “Square CTO: We’re Not Worried About NFC.” ZDNet. Jul. 11, 2012. [Link](#)
135. Christie Smythe, Dakin Campbell. (2012) “Visa, MasterCard Settle Merchants’ Swipe-Fee Lawsuit.” Bloomberg. Jul. 14, 2012. [Link](#)
136. Christie Smythe, Dakin Campbell. (2012) “Visa, MasterCard Settle Merchants’ Swipe-Fee Lawsuit.” Bloomberg. Jul. 14, 2012. [Link](#)  
Jessica Silver-Greenberg. (2012) “MasterCard and Visa Will Pay Billions to Settle Antitrust Suit.” The New York Times. Jul. 13, 2012. [Link](#)
137. Although I first wrote about this theoretical idea in 2007, a company has recently begun offering credit card processing with no interchange fees, instead taking a share of revenue from loyalty programs and promotions.  
Christina Chaey. (2012) “LevelUp Will End Your Business’ Credit Card Processing Fees. Really.” Fast Company. Jul. 11, 2012. [Link](#)

138. This settlement has not been finalized yet.  
 Christie Smythe, Dakin Campbell. (2012) “Visa, MasterCard Settle Merchants’ Swipe-Fee Lawsuit.” Bloomberg. Jul. 14, 2012. [Link](#)  
 Jessica Silver-Greenberg. (2012) “MasterCard and Visa Will Pay Billions to Settle Antitrust Suit.” The New York Times. Jul. 13, 2012. [Link](#)
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 Christie Smythe, Dakin Campbell. (2012) “Visa, MasterCard Settle Merchants’ Swipe-Fee Lawsuit.” Bloomberg. Jul. 14, 2012. [Link](#)
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William Strauss, Neil Howe. (1991) “Generations: The History of America’s Future, 1584 to 2069.” William Morrow and Co. New York, NY.
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This quote is commonly attributed to Socrates, however, as with anything he supposedly said, it is suspect because all we know about Socrates comes from others who wrote about him. It is interesting to note further that some scholars believe this “quote” is actually a rewording of a passage from Aristophanes’ *The Clouds*, particularly because in this play, a caricature of Socrates is portrayed as a fraud, and Plato considered it to have contributed to his execution.  
Plato, James Helm (Ed.). (1997) “Plato: Apology.” Bolchazy-Carducci Publishers. Wauconda, IL.
257. Vern Bengtson. (1970) “The Generation Gap: A Review and Typology of Social-Psychological Perspectives.” *Youth & Society*. Vol. 2, No. 1, pp. 7-32.  
Vern Bengtson. (1971) “Inter-Age Perceptions and the Generation Gap.” *The Gerontologist*. Vol. 11, No. 4, pp. 85-89.
258. Author’s Note: After writing this, I came across a strikingly similar passage in the preface to the following report:  
Pew Research Center. (2010) “Millennials: Confident. Connected. Open to Change.” Pew Research Center. Washington, DC. [Link](#)
259. Stanley Coopersmith, Mary Regan, Lois Dick. (1975) “The Myth of the Generation Gap.” Albion Publishing. San Francisco, CA.  
Frank Giancola. (2006) “The Generation Gap: More Myth than Reality.” *Human Resource Planning*. Vol. 29, No. 4, pp. 32-37.

260. Daniel Schacter (Ed.) (1997) "Memory Distortion: How Minds, Brains, and Societies Reconstruct the Past." First Harvard University Press. Cambridge, MA.
261. Sydney Jones, Susannah Fox. (2009) "Generations Online in 2009." Pew Research Center. Washington, DC.
262. Tom Brokaw. (1998) "The Greatest Generation." Random House. New York, NY.
263. Ronald Reagan was born in 1911; Jimmy Carter and George H.W. Bush were born in 1924; Bill Clinton and George W. Bush were born in 1946. The first definition of the Silent Generation was those born between 1925 and 1945, although another common definition stopped at 1942.
- Staff Reporter. (1951) "People: The Younger Generation." Time. Nov. 5, 1951.
- William Strauss, Neil Howe. (1991) "Generations: The History of America's Future, 1584 to 2069." William Morrow and Co. New York, NY.
264. Landon Jones. (1980) "Great Expectations: America and the Baby Boom Generation." Coward-McCann. New York, NY.
- Santiago Budría Rodríguez, Javier Díaz-Giménez, Vincenzo Quadrini, José-Víctor Ríos-Rull. (2002) "Updated Facts on the U.S. Distributions of Earnings, Income, and Wealth." Federal Reserve Bank of Minneapolis Quarterly Review. Vol. 26, No. 3, pp. 2-35.
- Arthur Kennickell. (2003) "A Rolling Tide: Changes in the Distribution of Wealth in the U.S., 1989-2001." FEDS Working Paper No. 2003-24; Levy Economics Institute Working Paper No. 393. Social Science Research Network. Working Paper #427720. [Link](#)
- Dennis Cauchon. (2007) "Generation Gap? About \$200,000." USA Today. May 20, 2007. [Link](#)
265. Divorce rates roughly doubled in the US between the mid-1960s and mid-1970s.
- Betsey Stevenson, Justin Wolfers. (2007) "Marriage and Divorce: Changes and Their Driving Forces." Journal of Economic Perspectives. Vol. 21, No. 2, pp. 27-52.
- Source of data:
- Susan Carter, Scott Sigmund Gartner, Michael Haines, Alan Olmstead, Richard Sutch, Gavin Wright. (2006) "Historical Statistics of the United States: Millennial Edition." Cambridge University Press. New York, NY.
266. David Elkind. (1998) "All Grown Up and No Place to Go: Teenagers In Crisis." Perseus Books. New York, NY.
267. Peter Sacks. (1999) "Generation X Goes to College: An Eye-Opening Account of Teaching in Postmodern America." Open Court. Peru, IL.
268. Definitions of the Millennial Generation vary widely. Some go back to the late 1970s, some go as far forward as 2010. Definitions of Generation Z are



even more widely varied and may not solidify for some time; however, future demographers will likely define it as the generation that grew up with the internet.

269. Don Tapscott. (2008) “Grown Up Digital: How the Net Generation is Changing Your World.” McGraw Hill. New York, NY.
270. Matthew Futterman. (2011) “Has Baseball’s Moment Passed?” The Wall Street Journal. Mar. 31, 2011. [Link](#)
271. 97% of people ages 12-17 play computer, web, portable, or console games.  
Amanda Lenhart, Joseph Kahne, Ellen Middaugh, Alexandra Macgill, Chris Evans, Jessica Vitak. (2008) “Teens, Video Games and Civics.” Pew Research Center. Washington, DC. [Link](#)
272. Arlene Nicholas, John Lewis. (2008) “Millennial Attitudes Toward Books and E-Books.” The International Journal of the Book. Vol. 5, No. 2, pp. 81-92.
273. Staff Reporter. (2010) “Rutgers Student Suicide Renews Debate Over Cyberbullying.” Fox News. Oct. 1, 2010. [Link](#)  
Reuters. (2010) “Cyber-Bullying Causes More Depression, Study Finds.” Fox News. Sep. 21, 2010. [Link](#)  
Erik Eckholm, Katie Zezima. (2010) “Strategies Take Shape for Trials in Bully Case.” The New York Times. Sep. 15, 2010.
274. Michael Austin. (2009) “Texting While Driving: How Dangerous Is It?” Car & Driver. Jun. 2009. [Link](#)  
Mary Madden, Amanda Lenhart. (2009) “Teens and Distracted Driving.” Pew Research Center. Washington, DC.
275. Neil Howe, William Strauss. (2000) “Millennials Rising: The Next Great Generation.” Vintage Books. New York, NY.
276. Paul Taylor, Richard Morin. (2009) “Forty Years after Woodstock, A Gentler Generation Gap.” Pew Research Center. Washington, DC. [Link](#)
277. Nancy Gibbs. (2009) “The Growing Backlash Against Overparenting.” Time. Nov. 20, 2009. [Link](#)
278. Rick Lyman. (2006) “In Many Public Schools, the Paddle Is No Relic.” The New York Times. Sep. 30, 2006. [Link](#)
279. David Elkind. (1998) “All Grown Up and No Place to Go: Teenagers In Crisis.” Perseus Books. New York, NY.
280. Naomi Aoki. (2004) “Harshness of Red Marks Has Students Seeing Purple.” Boston Globe. Aug. 23, 2004. [Link](#)  
Staff Reporter. (2008) “Marking in Red Ink Banned in Case It Upsets Schoolchildren.” The Telegraph. Dec. 26, 2008. [Link](#)
281. Valen Johnson. (2003) “Grade Inflation: A Crisis in College Education.” Springer-Verlag. New York, NY.

Robert Ziomek, Joseph Svec. (1995) “High School Grades and Achievement: Evidence of Grade Inflation.” ACT Research Report Series 95-3. American College Testing Program. Iowa City, IA.

- 282. Ron Clark. (2011) “What Teachers Really Want to Tell Parents.” CNN. Sep. 6, 2011. [Link](#)
- 283. Eva Pomerantz, Elizabeth Moorman, Scott Litwack. (2007) “The How, Whom, and Why of Parents’ Involvement in Children’s Academic Lives: More Is Not Always Better.” *Review Of Educational Research*. Vol. 77, No. 3, pp. 373-410.
- 284. Adrian Bangerter, Chip Heath. (2004) “The Mozart Effect: Tracking the Evolution of a Scientific Legend.” *British Journal of Social Psychology*. Vol. 43, No. 4, pp. 605-623.
- 285. Lee Carroll, Jan Tober. (1999) “The Indigo Children: The New Kids Have Arrived.” Hay House. Carlsbad, CA.
- 286. Allen Frances. (2010) “Normality Is an Endangered Species: Psychiatric Fads and Overdiagnosis.” *Psychiatric Times*. Jul. 6, 2010.

Although many scientists found there to be little evidence that ADHD was systematically overdiagnosed, media and the public generally thought otherwise.

Mark Scitutto, Miriam Eisenberg. (2007) “Evaluating the Evidence For and Against the Overdiagnosis of ADHD.” *Journal of Attention Disorders*. Vol. 11, No. 2, pp. 106-113.

- 287. This was one of the most heavily researched topics between 1998 and 2010, and literally thousands of scientific studies found no link between the MMR vaccine and autism.

Hideo Honda, Yasuo Shimizu, Michael Rutter. (2005) “No Effect of MMR Withdrawal on the Incidence of Autism: A Total Population Study.” *Journal of Child Psychology and Psychiatry*. Vol. 46, No. 6, pp. 572-579.

Stanley Plotkin, Jeffrey Gerber, Paul Offit. (2009) “Vaccines and Autism: A Tale of Shifting Hypotheses.” *Clinical Infectious Diseases*. Vol. 48, No. 4, pp. 456-461.

- 288. A.J. Wakefield, S.H. Murch, A. Anthony, J. Linnell, D.M. Casson, M. Malik, M. Berelowitz, A.P. Dhillon, M.A. Thomson, P. Harvey, A. Valentine, S.E. Davies, J.A. Walker-Smith. (1998) “Ileal-Lymphoid-Nodular Hyperplasia, Non-Specific Colitis, and Pervasive Developmental Disorder in Children.” *The Lancet*. Vol. 351, No. 9103, pp. 637-641.

This research was later retracted.

The Editors of *The Lancet*. (2010) “Retraction—Ileal-Lymphoid-Nodular Hyperplasia, Non-Specific Colitis, and Pervasive Developmental Disorder in Children.” *The Lancet*. Vol. 375, No. 9713, p. 445.

- 289. The UK General Medical Council found Wakefield guilty of serious professional misconduct. Among the charges of dishonesty and

irresponsibility, they found that Wakefield conducted procedures on children that were both unnecessary and unauthorized, failed to disclose that he had received substantial sums of money from a law firm that was working on a case against a vaccine manufacturer, and also failed to disclose that he had filed a patent for a new vaccine before publishing his initial research.

General Medical Council. (2010) “Dr Andrew Jeremy Wakefield: Determination on Serious Professional Misconduct (SPM) and Sanction.” General Medical Council. London, England. May 24, 2010.

General Medical Council. (2010) “Fitness to Practise Panel Hearing.” General Medical Council. London, England. Jan. 28, 2010.

Zosia Kmietowicz. (2010) “Wakefield is Struck Off for the ‘Serious and Wide-Ranging Findings Against Him.’” *British Medical Journal*. Vol. 340, p. c2803.

Clare Dyer. (2010) “Wakefield Was Dishonest and Irresponsible Over MMR Research, Says GMC.” *British Medical Journal*. Vol. 340, p. c593.

Brian Deer. (2011) “How the Case Against the MMR Vaccine Was Fixed.” *British Medical Journal*. Vol. 342, p. c5347.

Brian Deer. (2011) “How the Vaccine Crisis Was Meant to Make Money.” *British Medical Journal*. Vol. 342, p. c5258.

290. Todd Elder. (2010) “The Importance of Relative Standards in ADHD Diagnoses: Evidence Based on Exact Birth Dates.” *Journal of Health Economics*. Vol. 29, No. 5, pp. 641-656.
291. Tanya Froehlich, Bruce Lanphear, Jeffery Epstein, William Barbaresi, Slavica Katusic, Robert Kahn. (2007) “Prevalence, Recognition, and Treatment of Attention-Deficit/Hyperactivity Disorder in a National Sample of US Children.” *Archives of Pediatrics & Adolescent Medicine*. Vol. 161, No. 9, pp. 857-864.
292. Gretchen LeFever, Keila Dawson, Ardythe Morrow. (1999) “The Extent of Drug Therapy for Attention Deficit-Hyperactivity Disorder among Children in Public Schools.” *American Journal of Public Health*. Vol. 89, No. 9, pp. 1359-1364.
- Gretchen LeFever, Margaret Villers, Ardythe Morrow, E. Sidney Vaughn, III. (2002) “Parental Perceptions of Adverse Educational Outcomes among Children Diagnosed and Treated for ADHD: A Call for Improved School/Provider Collaboration.” *Psychology in the Schools*. Vol. 39, No. 1, pp. 63-71.
- A good criticism of some conclusions commonly drawn from this work can be found in:
- Mark Sciotto, Miriam Eisenberg. (2007) “Evaluating the Evidence For and Against the Overdiagnosis of ADHD.” *Journal of Attention Disorders*. Vol. 11, No. 2, pp. 106-113.

293. Leslie Iversen. (2006) "Speed, Ecstasy, Ritalin: The Science of Amphetamines." Oxford University Press. New York, NY.
294. Todd Elder. (2010) "The Importance of Relative Standards in ADHD Diagnoses: Evidence Based on Exact Birth Dates." *Journal of Health Economics*. Vol. 29, No. 5, pp. 641-656.
295. Lydia Lum. (2006) "Handling 'Helicopter Parents.'" *Diverse: Issues in Higher Education*. Vol. 23, No. 20, pp. 40-43.
- Larry Gordon. (2010) "Keeping Parents' 'Helicopters' Grounded During College." *Los Angeles Times*. Aug. 29, 2010. [Link](#)
296. Sue Shellenbarger. (2006) "Helicopter Parents Go to Work: Moms and Dads Are Now Hovering at the Office." *The Wall Street Journal*. Mar. 16, 2006. [Link](#)
- Jennifer Ludden. (2012) "Helicopter Parents Hover in the Workplace." *NPR*. Feb. 6, 2012. [Link](#)
297. Pew Research Center. (2010) "Millennials: Confident. Connected. Open to Change." Pew Research Center. Washington, DC. [Link](#)
298. The examples in this section are drawn from some entries on this bookshelf:
- Chip Espinoza, Mick Ukleja, Craig Rusch. (2010) "Managing the Millennials: Discover the Core Competencies for Managing Today's Workforce." John Wiley & Sons. Hoboken, NJ.
- Bruce Tulgan. (2009) "Not Everyone Gets a Trophy: How to Manage Generation Y." Jossey-Bass. San Francisco, CA.
- Joanne Sujansky, Jan Ferri-Reed. (2009) "Keeping The Millennials: Why Companies Are Losing Billions in Turnover to This Generation – and What to Do About It." John Wiley & Sons. Hoboken, NJ.
- Nicole Lipkin, April Perrymore. (2009) "Y in the Workplace: Managing the 'Me First' Generation." The Career Press. Franklin Lakes, NJ.
- Carolyn Martin, Bruce Tulgan. (2001) "Managing Generation Y: Global Citizens Born in the Late Seventies and Early Eighties." HRD Press. Amherst, MA.

Also:

Cisco Systems. (2011) "2011 Cisco Connected World Technology Report." Cisco Systems. San Jose, CA.

299. Ruben Navarrette, Jr. (2011) "Are Millennials Cut Out for this Job Market?" *CNN*. Aug. 5, 2011. [Link](#)

In this quote, the author is summarizing the point of view in:

Jean Twenge. (2006) "Generation Me: Why Today's Young Americans Are More Confident, Assertive, Entitled--and More Miserable Than Ever Before." Free Press. New York, NY.

300. In 2010, the percentage of Americans living in multi-generational households continued climbing to become the highest it had been since the 1950s.
- Kim Parker. (2011) “The Boomerang Generation: Feeling OK about Living with Mom and Dad.” Pew Research Center. Washington, DC. [Link](#)
- Pew Research Center. (2010) “Millennials: Confident. Connected. Open to Change.” Pew Research Center. Washington, DC. [Link](#)
301. The authors of this research also suggest that the connotation of considering oneself important also changed over time, from a negative mark of grandeur to a positive mark of self-esteem, which is another dramatic social change.
- Cassandra Rutledge Newsom, Robert Archer, Susan Trumbetta, Irving Gottesman. (2003) “Changes in Adolescent Response Patterns on the MMPI/MMPI-A Across Four Decades.” *Journal of Personality Assessment*. Vol. 81, No. 1, pp. 74-84.
302. Douglas Falconer. (1981) “Introduction to Quantitative Genetics.” Longman. London, England.
- To be perfectly clear, the comparison to genetics is a metaphor only and does not refer to a genetic cause to the rise in narcissism.
303. Jeremy Paxman. (2011) “‘I Am Part of the Most Selfish Generation in History and We Should Be Ashamed of Our Legacy,’ Says Jeremy Paxman.” *Daily Mail*. Oct. 31, 2011. [Link](#)
- Robert Putnam. (2000). “Bowling Alone: The Collapse and Revival of American Community.” Simon & Schuster. New York, NY.
- Daniel Kadlec. (2006) “‘Me Generation’ becomes ‘We Generation.’” *USA Today*. Aug. 2, 2006. [Link](#)
304. Richard Munich, Matthew Munich. (2009) “Overparenting and the Narcissistic Pursuit of Attachment.” *Psychiatric Annals*. Vol. 39, No. 4, pp. 227-235.
305. Jean Twenge, Joshua Foster. (2009) “Birth Cohort Increases in Narcissistic Personality Traits Among American College Students, 1982-2009.” *Social Psychological and Personality Science*. Vol. 1, No. 1, pp. 99-106.
- Jean Twenge, W. Keith Campbell. (2009) “The Narcissism Epidemic: Living in the Age of Entitlement.” Free Press. New York, NY.
306. Jean Twenge, Sara Konrath, Joshua Foster, W. Keith Campbell, Brad Bushman. (2008) “Egos Inflating Over Time: A Cross-Temporal Meta-Analysis of the Narcissistic Personality Inventory.” *Journal of Personality*. Vol. 76, No. 4, pp. 875-902.
307. Pew Research Center. (2010) “Millennials: Confident. Connected. Open to Change.” Pew Research Center. Washington, DC. [Link](#)
308. Don Tapscott. (2008) “Grown Up Digital: How the Net Generation Is Changing Your World.” McGraw Hill. New York, NY.

309. Neil Howe, William Strauss. (2000) “Millennials Rising: The Next Great Generation.” Vintage Books. New York, NY.

The same authors predicted Millennials to be a Hero/Civic generation archetype in:

William Strauss, Neil Howe. (1991) “Generations: The History of America’s Future, 1584 to 2069.” William Morrow and Co. New York, NY.

Also:

Morley Winograd, Michael Hais. (2008) “Millennial Makeover: MySpace, YouTube, and the Future of American Politics.” Rutgers University Press. Piscataway, NJ.

Morley Winograd, Michael Hais. (2011) “Millennial Momentum: How a New Generation Is Remaking America.” Rutgers University Press. Piscataway, NJ.

310. Pew Research Center. (2010) “Millennials: Confident. Connected. Open to Change.” Pew Research Center. Washington, DC. [Link](#)
311. Neil Howe, William Strauss. (2000) “Millennials Rising: The Next Great Generation.” Vintage Books. New York, NY.
- Eric Greenberg, Karl Weber. (2008) “Generation We: How Millennial Youth are Taking Over America and Changing Our World Forever.” Pachatusan. Emeryville, CA.
312. Paul Taylor, Richard Morin. (2009) “Forty Years after Woodstock, a Gentler Generation Gap.” Pew Research Center. Washington, DC. [Link](#)
313. Pew Research Center. (2010) “Religion among the Millennials.” Feb. 17, 2010. [Link](#)
314. Pew Research Center. (2007) “A Portrait of ‘Generation Next:’ How Young People View Their Lives, Futures and Politics.” Jan. 9, 2007. [Link](#)
315. Scott Keeter, Paul Taylor. (2009) “The Millennials.” Pew Research Center. Washington, DC. [Link](#)
316. Arthur Brooks. (2006) “Who Really Cares: The Surprising Truth about Compassionate Conservatism.” Basic Books. New York, NY.
- Nicholas Kristof. (2008) “Bleeding Heart Tightwads.” The New York Times. Dec. 20, 2008. [Link](#)
317. Jean Twenge, W. Keith Campbell, Elise Freeman. (2012) “Generational Differences in Young Adults’ Life Goals, Concern for Others, and Civic Orientation, 1966–2009.” Journal of Personality and Social Psychology. Vol. 102, No. 5, pp. 1045-1062.
318. US Bureau of Labor Statistics. (2011) “American Time Use Survey.” US Department of Labor. Washington, DC. [Link](#)
319. Dave Banks. (2010) “After 100 Years, Are the Boy Scouts Still Relevant?” Wired. Feb. 8, 2010. [Link](#)

The decline may actually be even sharper, as the FBI found that some groups reported inflated numbers to secure more funding.

Martin Savidge. (2005) "FBI Investigates Boy Scouts for Fraud." MSNBC. Feb. 17, 2005. [Link](#)

320. Megan Greenwell. (2009) "Girl Scouts Is Modernizing, Rebranding Itself as Membership Falls." The Washington Post. Mar. 2, 2009. [Link](#)
321. Andrea Stone. (2009) "'Civic Generation' Rolls Up Sleeves in Record Numbers." USA Today. Apr. 14, 2009. [Link](#)
322. Michelle Healy. (2012) "Millennials Might Not Be So Special After All, Study Finds." USA Today. Mar. 15, 2012. [Link](#)
323. Rebecca Skinner, Chris Chapman. (1999) "Service-Learning and Community Service in K-12 Public Schools." National Center for Education Statistics. Washington, DC.
324. 59% of students who participated in service-learning programs said that they did so to fulfill a requirement.

Dana Markow, Suzanne Martin, Gretchen Comey, Emily Zwanziger, Amie Kim. (2005) "The National Survey on Service-Learning and Transitioning to Adulthood." National Youth Leadership Council. St. Paul, MN.

325. Mike Planty, Robert Bozick, Michael Regnier. (2006) "Helping Because You Have To or Helping Because You Want To? Sustaining Participation in Service Work from Adolescence through Young Adulthood." Youth & Society. Vol. 38, No. 2, pp. 177-202.
326. Ben Mezrich. (2009) "The Accidental Billionaires: The Founding of Facebook: A Tale of Sex, Money, Genius, and Betrayal." Doubleday. New York, NY.
327. Bart Gzik. (2011) "Indispensable Technologies: Mapping the Co-Evolution of Needs and Novelty in the Digital Revolution." Universiteit Utrecht. Utrecht, Netherlands.

Elisabeth Platzer, Otto Petrovic, Wolf Rauch, Martina Brunnhofer. (2010) "Causes and Consequences of Mobile Phone's Indispensability for Everyday Life." Paper presented at the 2010 Ninth International Conference on Mobile Business and 2010 Ninth Global Mobility Roundtable (ICMB-GMR). Jun. 13-15, 2010.

Don Tapscott. (2008) "Grown Up Digital: How the Net Generation is Changing Your World." McGraw Hill. New York, NY.

Lee Rainie, John Horrigan. (2005) "A Decade of Adoption: How the Internet Has Woven Itself into American Life." Pew Research Center. Washington, DC.

Donna Hoffman, Thomas Novak, Alladi Venkatesh. (2004) "Has The Internet Become Indispensable? Empirical Findings and Model Development." Communications of the ACM. Vol. 47, No. 7, pp. 37-42.

328. Kathryn Zickuhr. (2011) “Generations and Their Gadgets.” Pew Research Center. Washington, DC.
329. This is an area that is being explored. Not long ago, dependence on internet technology used to be seen as a rare condition, an extension of other addictions.

Kimberly Young, Molly Pistner, James O’Mara, Jennifer Buchanan. (1999) “Cyber Disorders: The Mental Health Concern for the New Millennium.” *Cyberpsychology & Behavior*. Vol. 2, No. 5, pp. 475-479.

In 2008, a market research group found that 27% of respondents to a questionnaire experienced significantly more anxiety when deprived of internet or wireless access.

Solutions Research Group. (2008) “Age of Disconnect Anxiety.” Solutions Research Group. Toronto, ON.

Since then, scholars have been working to measure the effects in a more scientific manner. Some efforts:

John Durocher, Kelly Lufkin, Michelle King, Jason Carter. (2011) “Social Technology Restriction Alters State-Anxiety but Not Autonomic Activity in Humans.” *American Journal of Physiology – Regulatory, Integrative, and Comparative Physiology*. Vol. 301, No. 6, pp. R1773-R1778.

Michelle Hackman. (2011) “Communication Underload: Validating the Existence of Disconnect Anxiety.” John. L. Miller Great Neck North High School.

The latter entry is notable because although the research does not appear in a peer-reviewed journal – in fact, it was a project conducted by a blind 17-year-old high school student – it was conducted with more scientific rigor than dozens of well-funded university and commercial research projects that have attempted to study this phenomenon.

330. Judy Pearson, Anna Carmon, Cloy Tobola, Michael Fowler. (2010) “Motives for Communication: Why the Millennial Generation Uses Electronic Devices.” *Journal of the Communication, Speech & Theatre Association of North Dakota*. Vol. 22, pp. 45-56.
- Cisco Systems. (2011) “2011 Cisco Connected World Technology Report.” Cisco Systems. San Jose, CA.
331. In 2011, mobile phone owners ages 18-24 sent and received an average of 109.5 text messages each day.
- Aaron Smith. (2011) “Americans and Text Messaging.” Pew Research Center. Washington, DC.
332. In 2009, American girls ages 14-17 sent an average of 100 text messages each day. (Figure does not include messages received.)
- Amanda Lenhart, Rich Ling, Scott Campbell, Kristen Purcell. (2010) “Teens and Mobile Phones.” Pew Research Center. Washington, DC.



333. Graeme Paton. (2010) “Children ‘More Likely to Own a Mobile Phone Than a Book.’” *The Telegraph*. May 26, 2010. [Link](#)
334. Kathryn Zickuhr. (2011) “Generations and Their Gadgets.” Pew Research Center. Washington, DC.
335. Amanda Lenhart, Kristen Purcell, Aaron Smith, Kathryn Zickuhr. (2010) “Social Media & Mobile Internet Use among Teens and Young Adults.” Pew Research Center. Washington, DC.
336. Gina Sverdlov, Reineke Reitsma, Amelia Martland, Samantha Jaddou. (2011) “The State of Consumers and Technology: Benchmark 2011, US.” Forrester Research. Cambridge, MA.
337. Researchers find that extraverts use social networking for social enhancement, while introverts use it for social compensation, both of which are related to greater usage and narcissism.  
Daria Kuss, Mark Griffiths. (2011) “Online Social Networking and Addiction—A Review of the Psychological Literature.” *International Journal of Environmental Research & Public Health*. Vol. 8, No. 9, pp. 3528-3552.
338. Janna Quitney Anderson, Lee Rainie. (2010) “Millennials’ Likely Lifelong Online Sharing Habit.” Pew Research Center. Washington, DC.
339. Farhad Manjoo. (2011) “Not Sharing Is Caring.” *Slate*. Sep. 22, 2011. [Link](#)
340. The Nielsen Company. (2011) “State of the Media: The Social Media Report Q3 2011.” The Nielsen Company. New York, NY.
341. Millennials ages 18-29 had 696 Facebook friends each on average.  
Dan Schawbel. (2012) “Gen-Y & Facebook Study.” Millennial Branding. Boston, MA.
342. In this study, 70% of Millennials said they felt more excited when their friends agreed with them about how to spend their time and money on leisure activities.  
Barkley, Boston Consulting Group, Service Management Group. (2011) “American Millennials: Deciphering the Enigma Generation.” Barkley. Kansas City, MO.
343. Jaelyn Cabral. (2008) “Is Generation Y Addicted to Social Media?” *Elon Journal of Undergraduate Research in Communications*. Vol. 2, No. 1, pp. 5-14.  
D. Karaiskos, E. Tzavellas, G. Balta, T. Paparrigopoulos. (2010) “Po2-232 - Social Network Addiction: A New Clinical Disorder?” *European Psychiatry*. Vol. 25, Suppl. 1, p. 855.  
Daria Kuss, Mark Griffiths. (2011) “Online Social Networking and Addiction—A Review of the Psychological Literature.” *International Journal of Environmental Research & Public Health*. Vol. 8, No. 9, pp. 3528-3552.
344. Cisco Systems. (2011) “2011 Cisco Connected World Technology Report.” Cisco Systems. San Jose, CA.

345. Cisco Systems. (2011) “2011 Cisco Connected World Technology Report.” Cisco Systems. San Jose, CA.
346. Invisible Children. (2012) “Kony 2012.” YouTube. Mar. 5, 2012. [Link](#)
347. Samantha Grossman. (2012) “‘Kony 2012’ Documentary Becomes Most Viral Video in History.” Time. Mar. 12, 2012. [Link](#)
348. Conrad Quilty-Harper. (2012) “Kony 2012: Stats Breakdown of the Viral Video.” The Telegraph. Mar. 9, 2012. [Link](#)
349. Lee Rainie, Paul Hitlin, Mark Jurkowitz, Michael Dimock, Shawn Neidorf. (2012) “The Viral Kony 2012 Video.” Pew Research Center. Washington, DC.
350. Conrad Quilty-Harper. (2012) “Kony 2012: Stats Breakdown of the Viral Video.” The Telegraph. Mar. 9, 2012. [Link](#)
351. Staff Reporter. (2012) “Uganda Screenings of Kony Film Halted After Protests.” AFP. Mar. 15, 2012. [Link](#)
352. Staff Reporter. (2012) “Ugandan PM: Kony 2012 Video Gives False Impression.” The Telegraph. Mar. 18, 2012. [Link](#)
353. Staff Reporter. (2009) “LRA Rebels Fleeing Towards Central African Republic.” AFP. Jan. 2, 2009.
- Els De Temmerman. (2009) “LRA’s Joseph Kony to Seek Protection from Sudan Army.” New Vision. Nov. 22, 2009.
- Anneke Van Woudenberg, Ida Sawyer, Maria Burnett, Elise Keppler. (2010) “Trail of Death: LRA Atrocities in Northeastern Congo.” Human Rights Watch. New York, NY.
- Michael Wilkerson. (2010) “Why Can’t Anyone Stop the LRA?” Foreign Policy. Apr. 19, 2010. [Link](#)
- Andre Le Sage. (2011) “Countering the Lord’s Resistance Army in Central Africa.” Institute for National Strategic Studies. Washington, DC.
- Mareike Schomerus, Tim Allen, Koen Vlassenroot. (2011) “Obama Takes on the LRA: Why Washington Sent Troops to Central Africa.” Foreign Affairs. Nov. 15, 2011. [Link](#)
- Staff Reporter. (2012) “Ugandan PM: Kony 2012 Video Gives False Impression.” The Telegraph. Mar. 18, 2012. [Link](#)
- Mareike Schomerus, Tim Allen, Koen Vlassenroot. (2012) “KONY 2012 and the Prospects for Change.” Foreign Affairs. Mar. 13, 2012. [Link](#)
354. Invisible Children. (2012) “Critiques.” InvisibleChildren.com. Mar. 8, 2012. (Updated multiple times in March 2012, now removed.)

This document was revised a few days after it was first published, and the support for the UPDF was removed. Later in the month, it was edited again, and a revised statement was added that said that IC advocated for the Ugandan regional government, but did not support it monetarily. Furthermore, the statement acknowledged the human rights violations

committed by the Ugandan government and the UPDF, but called the UPDF “a necessary piece in counter-LRA activities.”

The founders of Invisible Children also posed while holding guns alongside members of the Sudan People’s Liberation Army for a photograph that became infamous. (The SPLA is also accused of countless human rights violations.)

Elizabeth Flock. (2012) “Invisible Children Founders Posing with Guns: an Interview with the Photographer.” *The Washington Post*. Mar. 8, 2012. [Link](#)

Also see:

Noelle Jouglet. (2012) “KONY 2012 - Help Raise Awareness and Stop Joseph Kony.” *Reddit*. Mar. 6, 2012. [Link](#)

355. In Transparency International’s 2010 Corruption Perceptions Index, Uganda scored a 2.5 out of 10, tied with Belarus, Ecuador, Lebanon, Nicaragua, Syria, and Timor-Leste.

Transparency International. (2011) “Corruption Perceptions Index 2010.” Transparency International. Berlin, Germany.

356. Nidal Nabil Jurdi. (2011) “The International Criminal Court and National Courts: A Contentious Relationship.” Ashgate Publishing, London, England.

Amnesty International. (2011) “Amnesty International Report 2011: The State of the World’s Human Rights.” Amnesty International. London, England.

Emma Mutaizibwa. (2012) “UPDF in Kony Hunt Accused of Rape, Looting.” *The Observer*. Mar. 2, 2012. [Link](#)

Mahmood Mamdani. (2012) “Kony: What Jason Did Not Tell the Invisible Children.” *Al Jazeera*. Mar. 13, 2012. [Link](#)

Michael Deibert. (2012) “The Problem with Invisible Children’s ‘Kony 2012.’” *The Huffington Post*. Mar. 7, 2012. [Link](#)

357. Oren Dorell. (2012) “‘Kony 2012’ Viral Video by Invisible Children Stirs Debate.” *USA Today*. Mar. 9, 2012. [Link](#)

358. Chenda Ngak. (2012) “Invisible Children’s ‘Kony 2012’ Viral Video Stirs Emotion and Controversy.” *CBS News*. Mar. 8, 2012. [Link](#)

359. Meghan Keneally. (2012) “Kony 2012 Filmmakers Under Fire for Funding from Anti-Gay Christians.” *Daily Mail*. Mar. 12, 2012. [Link](#)

360. Invisible Children. (2011) “2011 Financial Statement.” *InvisibleChildren.com*. Sep. 22, 2011.

Invisible Children. (2012) “Critiques.” *InvisibleChildren.com*. Mar. 8, 2012. (Updated multiple times in March 2012, now removed.)

361. Staff Reporter. (2012) “‘Kony 2012’ Exec Joked About Keeping \$900k Donation for Himself.” *TMZ*. Mar. 27, 2012. [Link](#)

For context, the contest ended shortly after a major earthquake in Haiti, and just before this, Invisible Children promised to donate \$100,000 of the million-dollar prize to relief work there.

Laren Poole. (2010) “Help Invisible Children Give Away 100K for Haiti.” The Huffington Post. Jan. 20, 2010. [Link](#)

362. Nathaniel Whittemore. (2010) “More Dubious Behavior in the Chase Contest.” Change.org. Jan. 19, 2010. [Link](#)

363. Angelo Izama. (2012) “Acholi Street. Stop #Kony2012. Invisible Children’s Campaign of Infamy.” Angelo Opi-aiya Izama (Personal Blog). Mar. 7, 2012. [Link](#)

Mike Pflanz. (2012) “Joseph Kony 2012: Growing Outrage in Uganda Over Film.” The Telegraph. Mar. 8, 2012. [Link](#)

Ishaan Tharoor. (2012) “Why You Should Feel Awkward About the ‘Kony2012’ Video.” Time. Mar. 8, 2012. [Link](#)

Kate Cronin-Furman, Amanda Taub. (2012) “Solving War Crimes with Wristbands: The Arrogance of ‘Kony 2012.’” The Atlantic. Mar. 8, 2012. [Link](#)

364. Polly Curtis, Tom McCarthy. (2012) “Kony 2012: What’s the Real Story?” The Guardian. Mar. 8, 2012. [Link](#)

365. Polly Curtis, Tom McCarthy. (2012) “Kony 2012: What’s the Real Story?” The Guardian. Mar. 8, 2012. [Link](#)

See also:

John Vidal, Mustafa Khalili, Alex Healey, Ken Macfarlane. (2012) “Kony 2012: John Vidal’s Verdict.” The Guardian. Mar. 8, 2012. [Link](#)

366. Parallels: Infomercials are typically 30 minute-long videos, which contain few facts but spend the majority of the time using a variety of emotional appeals to make the audience focus on a specific problem they normally would not think about, then resolve the problem by showcasing an easy, affordable solution at the end.

367. Invisible Children. (2012) “Kony 2012.” YouTube. Mar. 5, 2012. [Link](#)

Invisible Children. (2012) “Kony Bracelet.” Invisible Children Store. Mar. 9, 2012. [Link](#)

Invisible Children. (2012) “Kony 2012 Action Kit.” Invisible Children Store. Mar. 9, 2012. [Link](#)

368. A typical headline the day after the video was released:

Enjoli Francis. (2012) “‘Kony 2012’ Campaign Against Uganda Warlord Takes Over Internet.” ABC News. Mar. 7, 2012. [Link](#)

369. Judson Berger. (2012) “Anti-Kony Campaign Draws Renewed Support on Hill, Opens Door to More US Involvement.” Fox News. Mar. 28, 2012. [Link](#)

370. J. David Goodman. (2012) “Backlash Aside, Charities See Lessons in a Web Video.” The New York Times. Mar. 16, 2012. [Link](#)

Robert Wright. (2012) “Can the Internet Catch Joseph Kony?” The Atlantic. Mar. 9, 2012. [Link](#)

371. Scott Stump. (2012) “Maker of ‘KONY 2012’ Video Deflects Critics, Urges Action.” MSNBC. Mar. 9, 2012. [Link](#)

372. Transparency International. (2011) “Corruption Perceptions Index 2010.” Transparency International. Berlin, Germany.

373. Eric Margolis. (2011) “Bwana Uncle Sam.” The Huffington Post. Oct. 31, 2011. [Link](#)

Josh Kron. (2011) “Uganda’s Oil Could Be Gift That Becomes a Curse.” The New York Times. Nov. 25, 2011. [Link](#)

“In America, it’s interesting because the political importance is that Obama has sent 100 troops to Uganda specifically to find and bring [Kony] to justice...Nobody knows exactly what they are doing now, they don’t seem to have any particular relevance, they don’t have any remit to go outside the country, so people in Uganda say they must be there to get the oil...we don’t have any idea what they are doing there, we have no way of knowing...In Uganda, it has very little political relevance because the war is over, and the man is not seen as any great threat. He’s not even living in the country.”

John Vidal, Mustafa Khalili, Alex Healey, Ken Macfarlane. (2012) “Kony 2012: John Vidal’s Verdict.” The Guardian. Mar. 8, 2012. [Link](#)

374. Anneke Van Woudenberg, Ida Sawyer, Maria Burnett, Elise Keppler. (2010) “Trail of Death: LRA Atrocities in Northeastern Congo.” Human Rights Watch. New York, NY.

375. Anneke Van Woudenberg, Ida Sawyer, Maria Burnett, Jehanne Henry, Elise Keppler. (2009) “The Christmas Massacres: LRA attacks on Civilians in Northern Congo.” Human Rights Watch. New York, NY.

376. In April 2012, Invisible Children’s four most popular videos on YouTube were “Kony 2012,” “Kony 2012: Part II - Beyond Famous,” and “Kony 2012 Teaser,” and “Protection Plan,” which were all released in the previous six weeks. The fifth most popular video, “Invisible Children: Who We Are,” had amassed about 175,000 views over the five years before “Kony 2012” was released, with nearly perfectly steady, linear growth.

YouTube. (2012) “Invisible Children: Uploaded Videos.” YouTube.com. Apr. 8, 2012. [Link](#)

Invisible Children. (2006) “Invisible Children: Who We Are.” YouTube. Dec. 12, 2006. [Link](#)

377. After the Kony 2012 video was released, the total number of views rose dramatically.

Invisible Children. (2011) “Invisible Children // Who is the LRA?” YouTube. Oct. 5, 2011. [Link](#)

378. One of the major flaws was that it still did not address the corruption and human rights violations of the African governments and military. From the

video: “Strengthening ongoing efforts of the African Union and regional governments is the best way to apprehend top LRA leadership, and it is something every country in the world can support.”

Invisible Children. (2012) “KONY 2012: Part II - Beyond Famous.” YouTube. Apr. 5, 2012. [Link](#)

379. On April 11, 2012, the original Kony 2012 video had 87 million views on YouTube, while the follow-up video had 1.5 million views. (Note: Viewing statistics have since been made private.)

Invisible Children. (2012) “KONY 2012: Part II - Beyond Famous.” YouTube. Apr. 5, 2012. [Link](#)

380. Megan Garber. (2012) “How Kony 2012’s Big Event Fizzled Out.” The Atlantic. Apr. 24, 2012. [Link](#)

Peter Walker. (2012) “Kony 2012 Charity’s Cover the Night Protest Draws Less Visible Support.” The Guardian. Apr. 20, 2012. [Link](#)

Chris Paine. (2012) “Kony 2012’s Struggle to Remain Visible.” The Telegraph. Apr. 21, 2012. [Link](#)

381. Rory Carroll. (2012) “Kony 2012 Cover the Night Fails to Move from the Internet to the Streets.” The Guardian. Apr. 21, 2012. [Link](#)

382. Staff Reporter. (2012) “New Jason Russell: The Naked Meltdown from Up Close.” TMZ. Mar. 18, 2012. [Link](#)

383. Note: Although IC later explained that this behavior was the result of dehydration and exhaustion, as with most news, the vast majority of attention was paid to the more scandalous details.

Sarah Grieco. (2012) “Invisible Children Co-Founder Detained: SDPD.” NBC. Mar. 17, 2012. [Link](#)

Staff Reporter. (2012) “‘Kony 2012’ Activist Reportedly Found Roaming Streets Nearly Naked after Suffering from ‘Exhaustion.’” Fox News. Mar. 16, 2012. [Link](#)

Eyder Peralta. (2012) “‘Invisible Children’ Co-Founder Detained by Police in San Diego.” NPR. Mar. 16, 2012. [Link](#)

384. A week after “Move” was released, it had about 120,00 views on YouTube.

Invisible Children. (2012) “MOVE: Invisible Children’s New Film from the Creators of KONY 2012.” YouTube. Oct. 14, 2012. [Link](#)

385. Janna Quitney Anderson. (2012) “Millennials Will Benefit and Suffer Due to Their Hyperconnected Lives.” Pew Research Center. Washington, DC.

Some comments from this study:

“Increasingly, teens and young adults rely on the first bit of information they find on a topic, assuming that they have found the ‘right’ answer, rather than using context and vetting/questioning the sources of information to gain a holistic view of a topic.”

“It’s simply not possible to discuss, let alone form societal consensus around, major problems without lengthy, messy conversations about those problems. A generation that expects to spend 140 or fewer characters on a topic and rejects nuance is incapable of tackling these problems.”

386. Sonya Sachdeva, Rumén Iliev, Douglas Medin. (2009) “Sinning Saints and Sainly Sinners: The Paradox of Moral Self-Regulation.” *Psychological Science*. Vol. 20, No. 4, pp. 523-528.
- Nina Mazar, Chen-Bo Zhong. (2010) “Do Green Products Make Us Better People?” *Psychological Science*. Vol. 21, No. 4, pp. 494-498.
387. The last words in the video are: “Above all, share this movie online. It’s free. Find it all at [Kony2012.com](http://Kony2012.com).” (Punctuation added.)
- Invisible Children. (2012) “Kony 2012.” YouTube. Mar. 5, 2012. [Link](#)
388. Author’s Note: I am either the last of Generation X or the first of the Millennials, depending on which demographer you ask. Either way, as I sit at my desk, trying to help solve social problems just by typing words into a computer, the hypocrisy is uncomfortably palpable.
389. Pew Research Center. (2010) “Millennials: Confident. Connected. Open to Change.” Pew Research Center. Washington, DC. [Link](#)
390. Paul Taylor, Richard Morin. (2009) “Forty Years after Woodstock, a Gentler Generation Gap.” Pew Research Center. Washington, DC. [Link](#)
391. Janna Quitney Anderson. (2012) “Millennials Will Benefit and Suffer Due to Their Hyperconnected Lives.” Pew Research Center. Washington, DC.
392. A reference to the 10,000 Hour Rule described in:
- Malcolm Gladwell. (2008) “Outliers.” Little, Brown and Co. New York, NY.
393. Christine Dugas. (2010) “Generation Y’s Steep Financial Hurdles: Huge Debt, No Savings.” *USA Today*. Apr. 23, 2010. [Link](#)
394. Tim Ferguson. (2007) “Broadband Adoption Passes Halfway Mark in U.S.” CNET. Feb. 18, 2007. [Link](#)
395. For an excellent example of DLC breathing new life into a game (no pun intended), see Rockstar’s *Red Dead Redemption: Undead Nightmare*, which sold over 2 million copies.
- Tom Magrino, Eddie Makuch. (2011) “Take-Two Sales Sink 12% in June Quarter.” *GameSpot*. Aug. 8, 2011. [Link](#)
- For another great example (coincidentally, another mod that filled a game with zombies), see the *Arma 2/DayZ* endnotes below.
396. DLC improved profit margins by combating the used game trade, since the original developers of the game did not receive any revenue from such sales. With the promise of new content in the future, some players who otherwise would have sold a game shortly after completing it decided instead to hold on to them, which kept those copies out of the used game market.

Later, this concept was extended, and games shipped with portions of the game locked from use. Original purchasers received a free unlock code that only worked once, forcing subsequent owners of the game to purchase a code to experience the full game. At present, more games are moving to this model, adding more value to original buyers of games and making them more difficult to pirate or resell. This practice is a stopgap that will be replaced by streaming gaming.

397. Mike Rose. (2012) “How a Mod Put Three-Year-Old Arma 2 on Top of Steam’s Charts.” Gamasutra. May 18, 2012. [Link](#)

398. Estimate based on the following information:

Arma 2 sold approximately 300,000 copies at full price (\$29.99) in the first two months the mod was available, at which point the mod had 330,000 unique users.

William Usher. (2012) “DayZ Helps Arma 2 Rack Up More Than 300,000 in Sales.” Cinema Blend. Jul. 1, 2012. [Link](#)

The game company credited up to 80% of those sales to the mod.

Luke Plunkett. (2012) “PC Zombie Darling Causes Sale Explosion, Arma Devs Happy to Help.” Kotaku. May 15, 2012.

A few months later, the mod had over a million unique users and was still growing.

Dean Hall. (2012) “About.” DayZMod.com. Aug. 6, 2012. [Link](#)

399. Thomas Debeauvais, Bonnie Nardi, Diane Schiano, Nicolas Ducheneaut, Nicholas Yee. (2011) “If You Build It They Might Stay: Retention Mechanisms in World of Warcraft.” Proceedings of the Sixth International Conference on the Foundations of Digital Games. ACM. New York, NY.

400. An incredibly rough prediction based on data extrapolated from:

IDATE. (2012) “World Television Report: Terrestrial - Cable - Satellite – IPTV.” IDATE. Montpellier, France.

IDATE. (2012) “World Video Game Market: Markets & Forecasts, 2011-2015.” IDATE. Montpellier, France.

Signals and Systems Telecom. (2012) “US Telecom Industry Assessment & Forecasts 2011 - 2020.” Signals and Systems Telecom. Ras Al Khaimah, United Arab Emirates.

PricewaterhouseCoopers. (2011) “Global Entertainment and Media Outlook: 2011-2015.” PricewaterhouseCoopers. London, England.

DFC Intelligence. (2011) “Worldwide Market Forecasts for the Video Game and Interactive Entertainment Industry.” DFC Intelligence. San Diego, CA.

Author’s Note: Forecasting is infamously inaccurate, although PricewaterhouseCoopers was very, very close in their estimates for 2012 in the 2008 version of their Global Entertainment and Media Outlook report.



Also taken into account is my own prediction that the television industry will experience a resurgence when a company finally introduces a convenient and affordable on-demand service that offers new content and also properly monetizes the content owners' extensive back catalogs of television shows and movies, similar to what Steam does for computer games. (Good candidates are Amazon, Apple, Google, Netflix, or Steam itself.)

401. Investment U. (2008) "The Video Game Industry: An \$18 Billion Entertainment Juggernaut." Seeking Alpha. Aug. 5, 2008. [Link](#)
402. Tom Chatfield. (2009) "Videogames Now Outperform Hollywood Movies." The Guardian. Sep. 26, 2009. [Link](#)
403. Don Reisinger. (2011) "Call of Duty: Modern Warfare 3 Makes \$1 Billion--In 16 Days." CNET. Dec. 12, 2011. [Link](#)
404. Forty-two critics awarded The Social Network an average score of 95/100. Metacritic. (2012) "The Social Network." Metacritic. Feb. 15, 2012. [Link](#)
405. The Academy of Motion Picture Arts and Sciences. (2011) "Winners and Nominees for the 83rd Academy Awards." Feb. 28, 2011. [Link](#)
- Caroline McCarthy. (2011) "'The Social Network' Nominated for Eight Oscars." CNET. Jan. 25, 2011. [Link](#)
406. John Horn. (2011) "'The Social Network' Is Friendied by the Hollywood Foreign Press." Los Angeles Times. Jan. 17, 2011. [Link](#)
407. Box Office Mojo. (2011) "The Social Network." Mar. 3, 2011. [Link](#)
408. In 2010, World of Warcraft accounted for 89% of Blizzard's consolidated net revenue, which was \$1.656 billion.
- Activision Blizzard. (2011) "Form 10-K Annual Report." United States Securities and Exchange Commission. Washington, DC.
- In 2011, World of Warcraft accounted for 90% of Blizzard's consolidated net revenue, which was \$1.243 billion.
- Activision Blizzard. (2012) "Form 10-K Annual Report." United States Securities and Exchange Commission. Washington, DC.
409. PricewaterhouseCoopers. (2011) "Global Entertainment and Media Outlook: 2011-2015." PricewaterhouseCoopers. London, England.
- Tim Cross. (2011) "All the World's a Game." The Economist. Dec. 10, 2011. [Link](#)
- Ian Livingstone. (2012) "Viewpoint: Video Games Tax Breaks Level the Playing Field." BBC News. Mar. 12, 2012. [Link](#)
410. For a great explanation of how free products distort our decision-making process, read:
- Dan Ariely. (2008) "Predictably Irrational: The Hidden Forces That Shape Our Decisions." HarperCollins. New York, NY.

411. John Gaudiosi. (2011) “Cloud Gaming Prospects for 2012.” FC Business Intelligence. London, England.
412. Jeferson Valadares. (2011) “Consumers Spend Average of \$14 per Transaction in iOS and Android Freemium Games.” Flurry. Jul. 25, 2011. [Link](#)
- Tim Rogers. (2011) “Who Killed Video Games? (A Ghost Story).” Insert Credit. Sep. 22, 2011. [Link](#)
- Adam Saltzman. (2011) “Contrivance and Extortion: In-App Purchases & Microtransactions.” Gamasutra. Oct. 18, 2011. [Link](#)
- Vic Roman. (2011) “Is DLC Evil?” 1UP.com. Nov. 3, 2011. [Link](#)
- Carter Dotson. (2011) “Why Do Freemium Games Get Such a Bad Rap?” Mashable. Nov. 15, 2011 [Link](#)
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- Markus Persson. (2011) “I Hate ‘Free to Play.’” The Word of Notch (Personal Blog). Oct. 24, 2011. [Link](#)
- Another good piece from an industry insider on the impact of freemium:
- Raphael van Lierop. (2012) “The True Cost of Free: What the Rise of Free to Play Might Mean for Single-Player Games.” Penny Arcade. Aug. 30, 2012. [Link](#)
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418. Facebook. (2012) “Facebook, Inc.: Amendment No. 4 to Form S-1.” United States Securities and Exchange Commission. Washington, DC. Apr. 23, 2012.
419. “Apps built by developers of social games, particularly Zynga, are currently responsible for substantially all of our revenue derived from Payments.”
- Facebook. (2012) “Facebook, Inc.: Amendment No. 4 to Form S-1.” United States Securities and Exchange Commission. Washington, DC. Apr. 23, 2012.
- Brittany Darwell. (2012) “Facebook Estimates 4 Percent of Q1 Revenue Came from Ads on Zynga App Pages, 11 Percent from Zynga Directly.” InsideFacebook. Apr. 23, 2012. [Link](#)
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422. Mark Pincus via Startup Berkeley. (2009) “Mark Pincus Talk at Startup@Berkeley.” Vimeo. Aug. 19, 2009. [Link](#)
423. Zynga. (2012) “Partners.” Zynga.org. Mar. 15, 2012. [Link](#)
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Justin Scheck, Shayndi Raice. (2011) “Zynga Leans on Some Workers to Surrender Pre-IPO Shares.” The Wall Street Journal. Nov. 10, 2011. [Link](#)
426. Former employees said copying games was a fundamental part of Zynga’s business strategy.  
Peter Jamison. (2009) “FarmVillains.” SF Weekly. Sep. 8, 2010. [Link](#)
427. Paul Tassi. (2012) “Everything Wrong with Zynga in One Image.” Forbes. Jan. 25, 2012. [Link](#)  
Paul Tassi. (2012) “Zynga Stock Falls as Second Post-IPO Game Fails to Impress.” Forbes. Jan. 6, 2012. [Link](#)  
Nick O’Neill. (2009) “Zynga Launches ‘FarmVille’. Does It Look Familiar?” AllFacebook. Jun. 22, 2009. [Link](#)
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Chenda Ngak. (2012) “Zynga Steal Tiny Tower? That’s What Developers Say.” CBS News. Jan 25, 2012. [Link](#)
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Doug Hyun Han, Nicolas Bolo, Melissa Daniels, Lynn Arenella, In Kyoon Lyoo, Perry Renshaw. (2011) “Brain Activity and Desire for Internet Video Game Play.” Comprehensive Psychiatry. Vol. 52, No. 1, pp. 88-95.
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 Benj Edwards. (2011) “Computer Space and the Dawn of the Arcade Video Game.” Technologist. Dec. 11, 2011. [Link](#)  
 Harold Goldberg. (2011) “All Your Base Are Belong to Us: How Fifty Years of Videogames Conquered Pop Culture.” Three Rivers Press. New York, NY.
440. Information Solutions Group. (2011) “2011 PopCap Games Social Gaming Research.” ISG. Bellevue, WA.
441. Thomas Debeauvais, Bonnie Nardi, Diane Schiano, Nicolas Ducheneaut, Nicholas Yee. (2011) “If You Build It They Might Stay: Retention Mechanisms in World of Warcraft.” Proceedings of the Sixth International Conference on the Foundations of Digital Games. ACM. New York, NY.
442. Julian Dibbell. (2003) “The Unreal Estate Boom.” Wired. Jan. 2003. [Link](#)
443. This study found that casual World of Warcraft players spent 17 hours per week playing.  
 Thomas Debeauvais, Bonnie Nardi, Diane Schiano, Nicolas Ducheneaut, Nicholas Yee. (2011) “If You Build It They Might Stay: Retention Mechanisms in World of Warcraft.” Proceedings of the Sixth International Conference on the Foundations of Digital Games. ACM. New York, NY.  
 This is consistent with earlier studies which also estimated an average playtime of 17 hours per week.  
 William Dobson. (2007) “Nielsen Ratings Say WoW Is Top Dog of the PC Domain.” Massively. Dec. 12, 2007. [Link](#)  
 Another study estimated MMORPG players to average 22 hours per week.  
 Nick Yee. (2006) “The Demographics, Motivations, and Derived Experiences of Users of Massively Multi-User Online Graphical Environments.” Presence: Teleoperators and Virtual Environments. Vol. 15, No. 3, pp. 309-329.

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Richard Haier, Rex Jung, Ronald Yeo, Kevin Head, Michael Alkire. (2005) "The Neuroanatomy of General Intelligence: Sex Matters." *NeuroImage*. Vol. 25, No. 1, pp. 320-327.

461. Adam Penenberg. (2011) "Digital Oxytocin: How Trust Keeps Facebook, Twitter Humming." *Fast Company*. Jul. 18, 2011. [Link](#)

Adam Penenberg. (2010) "Social Networking Affects Brains Like Falling in Love." *Fast Company*. Jul. 1, 2010. [Link](#)

These articles describe research that is anecdotal at best; however, they are specific to using Facebook and the results would be expected by what is known about oxytocin, namely, that oxytocin is elevated by a wide range of positive social experiences, from talking with other people to being touched, to even just being looked at by a pet dog.

Kerstin Uvnäs-moberg, Maria Petersson. (2005) "Social Interaction, Growth and Healing." *Diabetes*. Vol. 51, No. 1, pp. 1-25.

Miho Nagasawa, Takefumi Kikusui, Tatsushi Onaka, Mitsuaki Ohta. (2009) "Dog's Gaze at Its Owner Increases Owner's Urinary Oxytocin During Social Interaction." *Hormones and Behavior*. Vol. 55, No. 3, pp. 434-441.

462. Michael Kosfeld, Markus Heinrichs, Paul Zak, Urs Fischbacher, Ernst Fehr. (2005) "Oxytocin Increases Trust in Humans." *Nature*. Vol. 435, No. 7042, pp. 673-676.

Andreas Bartels, Semir Zeki. (2004) "The Neural Correlates of Maternal and Romantic Love." *NeuroImage*. Vol. 21, No. 3, pp. 1155-1166.

463. Paul Zak, Angela Stanton, Sheila Ahmadi. (2009) "Oxytocin Increases Generosity in Humans." *PLoS ONE*. Vol. 2, No. 11, p. e1128.

464. Paul Zak, Robert Kurzban, Sheila Ahmadi, Ronald Swerdloff, Jang Park, Levan Efremidze, Karen Redwine, Karla Morgan, William Matzner. (2009) "Testosterone Administration Decreases Generosity in the Ultimatum Game." *PLoS ONE*. Vol. 4, No. 12, p. e8330.

465. These activities also produce dopamine, and when performed with a partner, can even improve a romantic relationship.

Greg Strong, Arthur Aron. (2006) "The Effect of Shared Participation in Novel and Challenging Activities on Experienced Relationship Quality." (Kathleen D. Vohs, Eli J. Finkel, Eds.) In "Self and Relationships: Connecting Intrapersonal and Interpersonal Processes." Guilford Press. New York, NY. pp. 342-359.

466. Wilhelm Hofmann, Kathleen Vohs, Roy Baumeister. (2012) "What People Desire, Feel Conflicted About, and Try to Resist in Everyday Life." *Psychological Science*. Vol. 23, No. 6, pp. 582-588.

467. D. Karaiskos, E. Tzavellas, G. Balta, T. Paparrigopoulos. (2010) "Po2-232 - Social Network Addiction: A New Clinical Disorder?" *European Psychiatry*. Vol. 25, Suppl. 1, p. 855.

468. Joseph Kahne, Ellen Middaugh, Chris Evans. (2009) "The Civic Potential of Video Games." The MIT Press. Cambridge, MA.
469. Debra Fischer, Megan Schwamb, Kevin Schawinski, Chris Lintott, John Brewer, Matt Giguere, Stuart Lynn, Michael Parrish, Thibault Sartori, Robert Simpson, Arfon Smith, Julien Spronck, Natalie Batalha, Jason Rowe, Jon Jenkins, Steve Bryson, Andrej Prsa, Peter Tenenbaum, Justin Crepp, Tim Morton, Andrew Howard, Michele Belevu, Zachary Kaplan, Nick vanNispen, Charlie Sharzer, Justin DeFouw, Agnieszka Hajduk, Joe Neal, Adam Nemecek, Nadine Schuepbach, Valerij Zimmermann. (2012) "Planet Hunters: The First Two Planet Candidates Identified by the Public Using the Kepler Public Archive Data." *Monthly Notices of the Royal Astronomical Society*. Vol. 419, No. 4, pp. 2900-2911.

Note: You can play the game at [planethunters.org](http://planethunters.org). [Link](#)

470. Players were able to diagnose malaria with about 98% accuracy, just one percent less than an infectious disease expert would have achieved.
- Sam Mavandadi, Stoyan Dimitrov, Steve Feng, Frank Yu, Uzair Sikora, Oguzhan Yaglidere, Swati Padmanabhan, Karin Nielsen, Aydogan Ozcan. (2012) "Distributed Medical Image Analysis and Diagnosis through Crowdsourced Games: A Malaria Case Study." *PLoS ONE*. Vol. 7, No. 5, p. e37245.
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472. Katie Drummond. (2011) "U.S. Intelligence Will Train Super-Sleuths with Videogames." *Wired*. Nov. 22, 2011. [Link](#)
473. Marshall Jones, Robert Kennedy, Alvah Bittner, Jr. (1981) "A Video Game for Performance Testing." *American Journal of Psychology*. Vol. 94, No. 11, pp. 143-152.
474. Earnest Cavalli. (2008) "Man Imitates America's Army, Saves Lives." *Wired*. Jan. 18, 2008. [Link](#)
475. Anthony Gallagher, E. Matt Ritter, MD, Howard Champion, Gerald Higgins, Marvin Fried, Gerald Moses, C. Daniel Smith, Richard Satava. (2005) "Virtual Reality Simulation for the Operating Room." *Annals of Surgery*. Vol. 241, No. 2, pp. 364-372.
476. Neal Seymour, Anthony Gallagher, Sanziana Roman, Michael O'Brien, Vipin Bansal, Dana Andersen, Richard Satava. (2002) "Virtual Reality Training Improves Operating Room Performance." *Annals of Surgery*. Vol. 236, No. 4, pp. 458-464.
477. Chris Velazco. (2012) "Fitocracy Finally Exits Private Beta, Celebrates with a New iOS App." *TechCrunch*. Mar. 29, 2012. [Link](#)
- Steven Overly. (2011) "Now, a Smartphone App That Rewards Exercise." *The Washington Post*. Jan. 3, 2011. [Link](#)

Rip Empson. (2011) “RunKeeper Adds New Integration to Its Health Graph in Hopes of Building “The Facebook Of Fitness.”” TechCrunch. Jun. 26, 2011. [Link](#)

478. Leslie Kaufman. (2012) “On Facebook, Some Friendly Energy Rivalry.” The New York Times. Apr. 3, 2012. [Link](#)

Leslie Kaufman. (2009) “Utilities Turn Their Customers Green, with Envy.” The New York Times. Jan. 30, 2009. [Link](#)

479. Trefis Team. (2012) “Salesforce’s Chatter Aims to Be the Facebook of Enterprises.” Forbes. Apr. 4, 2012. [Link](#)

Staff Reporter. (2012) “The World’s 50 Most Innovative Companies in Social Media.” Fast Company. Feb. 13, 2012. [Link](#)

Tom Taulli. (2011) “Jive – The Facebook of Business.” InvestorPlace. Oct. 26, 2011. [Link](#)

480. Erik Malinowski. (2011) “How RunKeeper Could Become the Facebook of Fitness.” Wired. Jun. 7, 2011. [Link](#)

481. Dean Takahashi. (2011) “Update: Activision Is Slowly Nursing Call of Duty Elite Online Network Back to Health.” VentureBeat. Nov. 17, 2011. [Link](#)

482. Apart from companies built around achievement systems, like FourSquare, a good example of tightly controlled achievements in social media is Google News Badges, which allows users to earn badges Google designed by reading articles from Google News about various topics.

Eric Smalley. (2011) “Google Badges: What Have You Been Reading?” CNET. Jul. 15, 2011. [Link](#)

Google. (2011) “Google News Badges.” Google.com. Jul. 18, 2011. [Link](#)

483. Pew Research Center. (2010) “Millennials: Confident. Connected. Open to Change.” Pew Research Center. Washington, DC. [Link](#)

484. Zizi Papacharissi, Andrew Mendelson. (2008) “Toward a New(er) Sociability: Uses, Gratifications, and Social Capital on Facebook.” Paper presented at the Internet Research Conference, Oct. 2008. Copenhagen, Denmark.

485. Analysis has shown that it is not necessarily competitiveness that motivates change in this case.

Hunt Allcott. (2011) “Social Norms and Energy Conservation.” Journal of Public Economics. Vol. 95, No. 9-10, pp. 1082-1095.

Also, both Microsoft and Google previously released energy usage apps and subsequently shut them down, citing lack of interest.

Martin LaMonica. (2011) “Microsoft Kills Hohm Energy App.” CNET. Jun. 30, 2011. [Link](#)

Elinor Mills. (2011) “Google Euthanizes Google Health, Unplugs PowerMeter” CNET. Jun. 24, 2011. [Link](#)



486. US Bureau of Labor Statistics. (2008) “How Do Volunteers Find the Time?: Evidence from the American Time Use Study.” US Department of Labor. Washington, DC.
487. Almost any way you slice the data, volunteer rates in Utah are far higher than in every other state (as is participation in the Church of Jesus Christ of Latter-day Saints, whose members volunteer far more than average Americans).  
 Corporation for National & Community Service. (2011) “Volunteer Rates – States.” Corporation for National & Community Service. Washington, DC.  
 The Pew Forum on Religion & Public Life. (2012) “Mormons and Civic Life.” Mar. 15, 2012. Pew Research Center. Washington, DC.
488. Nicholas Epley, David Dunning. (2000) “Feeling ‘Holier Than Thou’: Are Self-Serving Assessments Produced by Errors in Self- or Social Prediction?” *Journal of Personality and Social Psychology*. Vol. 79, No. 6, pp. 861-875.  
 Justin Kruger, Thomas Gilovich. (2004) “Actions, Intentions, and Self-Assessment: The Road to Self-Enhancement Is Paved with Good Intentions.” *Personality and Social Psychology Bulletin*. Vol. 30, No. 3, 328-339.
489. Jerry Burger. (1999) “The Foot-in-the-Door Compliance Procedure: A Multiple-Process Analysis and Review.” *Personality and Social Psychology Review*. Vol. 3, No. 4, pp. 303-325.  
 In a study referenced earlier, those who participated in service programs voluntarily (rather than to fulfill a requirement) tended to keep doing it.  
 Mike Planty, Robert Bozick, Michael Regnier. (2006) “Helping Because You Have To or Helping Because You Want To? Sustaining Participation in Service Work from Adolescence through Young Adulthood.” *Youth & Society*. Vol. 38, No. 2, pp. 177-202.
490. According to this source, about 293,000 status updates were being added to Facebook every minute in 2011.  
 Team Popcorn. (2011) “Infographic: 60 Seconds of Social Media Sharing.” Popcorn. Sep. 26, 2011. [Link](#)  
 Although unspecific and unverified, this statistic was widely cited:  
 Mike Flacy. (2011) “Nearly 300,000 Status Updates are Posted to Facebook Every Minute.” Yahoo News. Oct. 8, 2011. [Link](#)  
 Chloe Albanesius. (2011) “Infographic: 60 Seconds of Social Media Sharing.” PC Magazine. Oct. 7, 2011. [Link](#)  
 According to Facebook, during the first quarter of 2012, on average, users uploaded more than 300 million photos and generated 3.2 billion “likes” and comments per day.  
 Facebook. (2012) “Key facts.” Facebook. Jun. 12, 2012. [Link](#)
491. Saul Hansell. (2008) “Zuckerberg’s Law of Information Sharing.” *The New York Times*. Nov. 6, 2008. [Link](#)

492. Criteria includes who posted the content, the type of content, and how many friends have commented on it.

Facebook. (2012) “How Does My News Feed Determine Which Content Is Most Interesting?” Facebook. May 11, 2012. [Link](#)

493. Josh Constine. (2012) “Your Average Facebook Post Only Reaches 12% of Your Friends.” TechCrunch. Feb. 29, 2012. [Link](#)

494. Josh Constine. (2011) “Facebook Changes News Feed Settings, Some Users Only Shown Close Friends by Default.” Inside Facebook. Feb. 11, 2011. [Link](#)

Rob Pegoraro. (2011) “Facebook News Feed Filtering Can Make Friends Vanish.” The Washington Post. Feb. 14, 2011. [Link](#)

495. This research found that posts with images were interacted with 54% more than text-only posts, and 22% more than video posts.

Erika Brookes. (2010) “The Anatomy of a Facebook Post.” Vitruve. Atlanta, GA.

496. Samuel Jacobs. (2012) “Chaos, Confusion Mark Cable TV Reports on Supreme Court Ruling.” Reuters. Jun. 28, 2012. [Link](#)

Martha Moore. (2012) “Supreme Court’s Complex Ruling Trips Up Media Outlets.” USA Today. Jun. 28, 2012. [Link](#)

Brian Stelter. (2012) “Rushing to Report the Health Ruling, and Getting It Wrong.” The New York Times. Jun. 28, 2012. [Link](#)

497. US Supreme Court. (2012) National Federation of Independent Business v. Sebelius, No. 11-393, slip op. Jun. 28, 2012.

498. While only 55% knew whether most provisions of the bill were upheld in the court’s ruling, 76% expressed approval or disapproval of the decision.

Pew Research Center. (2012) “Division, Uncertainty over Court’s Health Care Ruling.” Pew Research Center. Washington, DC. [Link](#)

499. Grant Jacobsen, Kathryn Jacobsen. (2011) “Health Awareness Campaigns and Diagnosis Rates: Evidence from National Breast Cancer Awareness Month.” Journal of Health Economics. Vol. 30, No. 1, pp. 55-61.

500. Christie Aschwanden. (2010) “The Downside of Awareness Campaigns.” Los Angeles Times. Oct. 4, 2010. [Link](#)

For reference:

Susan Love, Karen Lindsey. (2010) “Dr. Susan Love’s Breast Book (Fifth Edition).” Da Capo Press. Philadelphia, PA.

501. Nicole Gottlieb. (2001) “The Age of Breast Cancer Awareness: What Is the Effect of Media Coverage?” Journal of the National Cancer Institute. Vol. 93, No. 20, pp. 1520-1522.

See also:

W. Burke, A. H. Olsen, L. E. Pinsky, S. E. Reynolds, N. A. Press. (2001) "Misleading Presentation of Breast Cancer in Popular Magazines." *Effective Clinical Practice*. Vol. 4, No. 2, pp. 58-64.

502. Caryn Lerman, Kathryn Kash, Michael Stefanek. (1994) "Younger Women at Increased Risk for Breast Cancer: Perceived Risk, Psychological Well-Being, and Surveillance Behavior." *Journal of the National Cancer Institute Monographs*. No. 16, pp. 171-176,

503. Deena Blanchard, Joel Erblich, Guy Montgomery, Dana Bovbjerg. (2002) "Read All About It: The Over-Representation of Breast Cancer in Popular Magazines." *Preventive Medicine*. Vol. 35, No. 4, pp. 343-348.

One example of obsessive behavior based on the knowledge that relatives of people with cancer are at greater risk:

Steven Epstein, Ting Hsiang Lin, Janet Audrain, Michael Stefanek, Barbara Rimer, Caryn Lerman. (1997) "Excessive Breast Self-Examination Among First-Degree Relatives of Newly Diagnosed Breast Cancer Patients." *Psychosomatics*. Vol. 38, No. 3, pp. 253-261.

504. Women in this study also overestimated the absolute amount that breast screening would lower the likelihood of them dying from breast cancer within 10 years by about 150 times.

William Black, Robert Nease Jr., Anna Tosteson. (1995) "Perceptions of Breast Cancer Risk and Screening Effectiveness in Women Younger Than 50 Years of Age." *Journal of the National Cancer Institute*. Vol. 87, No. 10, pp. 720-731.

505. Deena Blanchard, Joel Erblich, Guy Montgomery, Dana Bovbjerg. (2002) "Read All About It: The Over-Representation of Breast Cancer in Popular Magazines." *Preventive Medicine*. Vol. 35, No. 4, pp. 343-348.

506. Society for Women's Health Research. (2005) "Women Most Fear Breast Cancer, but Heart Disease Is the Top Killer." Press Release. Jul. 14, 2005.

Note this study measured fear, rather than knowledge of top dangers among all women. (Although people typically view themselves as too unique for general statistics to apply to them anyway.) Knowledge that heart disease was the top cause of death among women has been increasing sharply; however awareness is lower among minorities and knowledge of prevention remains low.

Allison Christian, Wayne Rosamond, Anthony White, Lori Mosca. (2007) "Nine-Year Trends and Racial and Ethnic Disparities in Women's Awareness of Heart Disease and Stroke: An American Heart Association National Study." *Journal of Women's Health*. Vol. 16, No. 1, pp. 68-81.

507. Rose Marie Robertson. (2001) "Women and Cardiovascular Disease: The Risks of Misperception and the Need for Action." *Circulation*. Vol. 103, No. 19, pp. 2318-20.

Lori Mosca, Lawrence Appel, Emelia Benjamin, Kathy Berra, Nisha Chandra-Strobos, Rosalind Fabunmi, Deborah Grady, Constance Haan,

Sharonne Hayes, Debra Judelson, Nora Keenan, Patrick McBride, Suzanne Oparil, Pamela Ouyang, Mehmet Oz, Michael Mendelsohn, Richard Pasternak, Vivian Pinn, Rose Marie Robertson, Karin Schenck-Gustafsson, Cathy Sila, Sidney Smith Jr., George Sopko, Anne Taylor, Brian Walsh, Nanette Wenger, Christine Williams. (2004) "Evidence-Based Guidelines for Cardiovascular Disease Prevention in Women." *Journal of the American College of Cardiology*. Vol. 43, No. 5, pp. 900-921.

Scott Lippman, Waun Ki Hong. (2002) "Cancer Prevention Science and Practice." *Cancer Research*. Vol. 62, No. 18, pp. 5119-5125.

- 508. National Breast Cancer Coalition. (2011) "Ending Breast Cancer: A Baseline Status Report." National Breast Cancer Coalition. Washington, DC.
- 509. Lea Goldman. (2011) "The Big Business of Breast Cancer." *Marie Claire*. Sep. 14, 2011. [Link](#)
- Gayle Sulik. (2010) "Pink Ribbon Blues: How Breast Cancer Culture Undermines Women's Health." Oxford University Press. New York, NY.
- Christie Aschwenden. (2010) "The Downside of Awareness Campaigns." *Los Angeles Times*. Oct. 4, 2010. [Link](#)
- 510. Susan Donaldson James. (2010) "Bra Color Status on Facebook Goes Viral." *ABC News*. Jan. 8, 2010. [Link](#)
- 511. Damon Poeter. (2011) "Breast Awareness Meme Knocks Up Facebook." *PC Magazine*. Sep. 2, 2011. [Link](#)
- 512. Barron Lerner. (2001) "The Breast Cancer Wars: Hope, Fear, and the Pursuit of a Cure in Twentieth-Century America." Oxford University Press. New York, NY.
- 513. Stefano Puntoni, Steven Sweldens, Nader Tavassoli. (2011) "Gender Identity Salience and Perceived Vulnerability to Breast Cancer." *Journal of Marketing Research*. Vol. 48, No. 3, pp. 413-424.
- 514. Bruce Jancin. (2011) "Mammogram Compliance Is Poor." *Family Practice News*. Feb. 1, 2011, p. 40.
- 515. Based on the American Cancer Society's recommendations:  
 American Cancer Society. (2012) "Breast Cancer." American Cancer Society. Atlanta, GA. Jun. 11, 2012.  
  
 Although HIPAA privacy restrictions as they are currently written would prevent doctors from awarding this badge publicly, with sufficient demand and demonstrable public health benefits, either the law would change or creative workarounds would arise.
- 516. Real person, fictional quote.
- 517. To be clear, mammograms are generally accepted as effective for older women.

Doris Schopper, Chris de Wolf. (2009) “How Effective Are Breast Cancer Screening Programmes by Mammography? Review of the Current Evidence.” *European Journal of Cancer*. Vol. 45, No. 11, pp. 1916-1923.

However, a growing number of scientists argue against their role in medicine and efficacy in practice, saying that constant screening does more net harm than good, prompting thousands of women to have unnecessary treatment, sometimes losing their breasts, for precancerous conditions that would not turn into cancer. Although the following book is biased and not peer-reviewed, it presents a good overview of the body of evidence that argues against the efficacy of mammography screening.

Peter Gøtzsche. (2012) “Mammography Screening: Truth, Lies and Controversy.” Radcliffe Publishing. London, England.

Some of the author’s earlier research:

Ole Olsen, Peter Gøtzsche. (2001) “Cochrane Review on Screening for Breast Cancer with Mammography.” *The Lancet*. Vol. 358, No. 9290, pp. 1340-1342.

Other researchers have estimated that the likelihood that a mammogram would save a woman’s life is somewhere between .010% and .046%.

H. Gilbert Welch, Brittney Frankel. (2011) “Likelihood That a Woman with Screen-Detected Breast Cancer Has Had Her ‘Life Saved’ by that Screening.” *Archives of Internal Medicine*. Vol. 171, No. 22, pp. 2043-2046.

Other research suggests that mammography screening may not directly affect breast cancer mortality, although many other studies have concluded otherwise.

Philippe Autier, Mathieu Boniol, Anna Gavin, Lars Vatten. (2011) “Breast Cancer Mortality in Neighbouring European Countries with Different Levels of Screening but Similar Access to Treatment: Trend Analysis of WHO Mortality Database.” *British Medical Journal*. Vol. 343, d4411, pp. 1-10.

518. Based on recommendations from a real collaborative project between the three organizations.

American Cancer Society, American Diabetes Association, American Heart Association. (2011) “Everyday Choices.” [Link](#)

519. Breast cancer does affect some men, although this is comparatively rare.

Ian Fentiman, Alain Fourquet, Gabriel Hortobagyi. (2006) “Male Breast Cancer.” *The Lancet*. Vol. 367, No. 9510, pp. 595-604.

520. Similarly titled events exist today, although they are not very well known or widely observed. Some states organize Women’s Health Month events, usually in May, to coincide with Mothers’ Day. At the national level, the closest event is Women’s Health Week.

Office on Women’s Health. (2012) “National Women’s Health Week.” US Department of Health and Human Services. Washington, DC.

521. One official Men's Health Month is in June, coinciding with Fathers' Day.

Men's Health Month. (2012) "June is Men's Health Month." Men's Health Month. Washington, DC. [Link](#)

A more well-known and quickly growing event is Movember, in which men grow moustaches throughout the month of November to raise awareness for men's health issues.

Movember Foundation. (2011) "About Movember." Movember. Venice, CA. [Link](#)

522. Mostly science fiction at this point, but trends point in this direction. For breast cancer specifically, advances in MRI technology suggest that other imaging techniques may replace mammography when the procedure is refined enough to reduce the high incidence of false positive diagnoses.

Debbie Saslow, Carla Boetes, Wylie Burke, Steven Harms, Martin Leach, Constance Lehman, Elizabeth Morris, Etta Pisano, Mitchell Schnall, Stephen Sener, Robert Smith, Ellen Warner, Martin Yaffe, Kimberly Andrews, Christy Russell. (2007) "American Cancer Society Guidelines for Breast Screening with MRI as an Adjunct to Mammography." CA: A Cancer Journal for Clinicians. Vol. 57, No. 2, pp. 75-89.

Mieke Kriege, Cecile Brekelmans, Carla Boetes, Peter Besnard, Harmine Zonderland, Inge Marie Obdeijn, Radu Manoliu, Theo Kok, Hans Peterse, Madeleine Tilanus-Linthorst, Sara Muller, Sybren Meijer, Jan Oosterwijk, Louk Beex, Rob Tollenaar, Harry de Koning, Emiel Rutgers, Jan Klijn. (2004) "Efficacy of MRI and Mammography for Breast-Cancer Screening in Women with a Familial or Genetic Predisposition." The New England Journal of Medicine. Vol. 351, No. 5, pp. 427-437.

523. It is not hard to believe insurance providers will use all information available to calculate risk in the near future, and it probably will not be as voluntary and friendly as in this scenario.

Staff Reporter. (2012) "Insurance Data: Very Personal Finance." The Economist. Jun. 2, 2012. [Link](#)

Anecdotally, one data mining professional doesn't buy junk food with credit cards because he thinks insurance providers will soon use data in this manner.

Kashmir Hill. (2012) "Data Mining CEO Says He Pays for Burgers with Cash to Avoid Junk Food Purchases Being Tracked." Forbes. Jun. 15, 2012. [Link](#)

524. Author's Note: Creating a social movement is a difficult feat, and my hat goes off to anyone who convinces people, especially men, to pay more attention to a health concern. This criticism is not directed at the Movember movement or any other movement. This criticism is directed at people who only superficially participate in a movement without doing anything substantial for a cause. This is one of the unintentional consequences of any movement that confers positive social status with a low barrier to entry, which are

unfortunately two criteria that are all but required to gain traction in modern culture.

525. A finding this drastic would have to be limited to human-generated updates, since app-generated content will likely continue to increase exponentially.
526. Junghyun Kim, Jong-Eun Roselyn Lee. (2011) “The Facebook Paths to Happiness: Effects of the Number of Facebook Friends and Self-Presentation on Subjective Well-Being.” *Cyberpsychology, Behavior, and Social Networking*. Vol. 14, No. 6, pp. 359-364.
527. The sense of security this would cause would likely increase unprotected sexual activity somewhat; however, this would likely be outweighed by the level of risk reduction caused by frequent testing, resulting in a net positive effect.
528. Previous attempts include branding similar services as Microsoft Wallet, Microsoft Passport, .NET Passport, Microsoft Passport Network, and Windows Live ID. In 2008, Microsoft announced it would turn Windows Live ID into an OpenID system, but to date, this has not happened.
- Michael Calore. (2008) “PDC 2008: Windows Live ID Becomes an OpenID Provider.” *Webmonkey*. Oct. 27, 2008. [Link](#)
- David Burt. (2009) “Windows Live ID OpenID Status Update.” Microsoft. Aug. 27, 2009. [Link](#)
- Microsoft. (1999) “Microsoft Passport: Streamlining Commerce and Communication on the Web.” Press Release. Oct. 11, 1999. [Link](#)
529. Facebook. (2012) “Facebook for Websites.” Facebook.com. Aug. 18, 2012. [Link](#)

