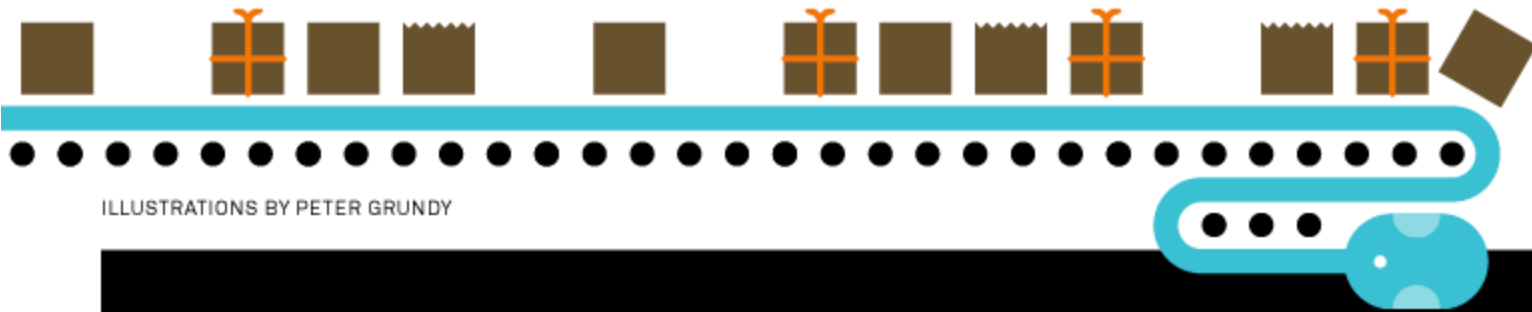# YOU ARE BEING Gamed

How online companies trick you into sharing more, joining more, and spending more.

By Dan Ariely

PHOTOGRAPH BY CHRISTOPHER GRIFFITH
BRAIN CREATED BY MEGAN CAPONETTO/APOSTROPHE

You're not stupid, but you can be fooled.

For millennia, the best salespeople have known how to exploit the vulnerabilities of the human mind. In the burgeoning field of behavioral economics, we've begun to give precise names to the mental weaknesses that make us all susceptible to a well-crafted pitch. Drawing on the insights of psychology, behavioral economists have explained why we buy more stuff at $0.99 than at $1.00 (the "left-digit effect"), why we commit to gym memberships we'll never use ("optimism bias"), and why we don't return things we buy as often as we should ("post-purchase rationalization"). The giants of the web, from Amazon to Zynga, use similar tricks to keep us coming to their sites, playing their games, and buying their goods. In fact, that's how they became giants in the first place. Scroll down to learn how they game us—and how, in some cases, we wind up gaming ourselves.

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AMAZON

Choose your shipping options

amazon.com

Shipping Details (Learn more)

Choose a shipping preference:

- ⦿ Group my items into as few shipments as possible.
- ○ I want my items faster. Ship them as they become available. (at additional cost)

Choose a shipping speed:

- ○ FREE Super Saver Shipping (5-8 business days)
- ○ Standard Shipping (3-5 business days)
- ⦿ FREE Two-Day Shipping with a free trial of Amazon*Prime™* **--get it Friday, May 20** (Learn more)
- ○ Two-Day Shipping **--get it Friday, May 20**

value our time so highly. But during the few seconds in which we make our buying decisions, when we are not thinking very deeply, the barrier to entering that data seems too forbidding and we default to Amazon.

Amazon also created two smart solutions to the problem of shipping cost, which has always been one of the biggest psychological hurdles to buying online. The first is Super Saver Shipping, which sets a $25 threshold to qualify for free shipping. This turns a lot of one-item purchases into two-item sprees, as people add an extra book or CD just to avoid shipping costs.

ELIMINATING SMALL FRICTIONS can radically alter one's decisions. An elegant demonstration of this comes from research by Eric Johnson and Dan Goldstein, who asked people whether they wanted to opt out of organ donation (i.e., starting with the choice preset at "donate") instead of asking whether they wanted to donate (presetting at "don't donate"). That switch caused the pro-donation response to rise from around 40 percent to more than 80 percent. This is the power of *defaults*: We have a marked tendency to take the path of least resistance.

For many of us, Amazon.com functions as a default because it has all our credit cards and addresses on file. If we asked people how much they would pay to save the time needed to retype that information on another site, they'd most likely say, "Not much." Most of us don't

The more interesting mechanism is Amazon Prime, the option I have been using for years. For an up-front fee of $79 a year, I get free two-day shipping on almost everything I order. I suspect that Amazon Prime causes shoppers to buy considerably more, and for three reasons. First, knowing that one store has free shipping makes us less likely to search for another place to buy. Second, once on Amazon, the cost of shipping is no longer a psychological barrier, so impulse shopping is less inhibited. Third, because we've essentially paid shipping in advance, it becomes a sunk cost—so to make it a good deal, we try to amortize our investment by making more purchases on the site.

Netflix

Netflix built a billion-dollar business on one simple principle: People hate late fees. With traditional video stores, customers always had to choose between racking up extra charges and returning an overdue movie without watching it. Besides eliminating the late fee, Netflix offered an exhaustive selection of films from which each user could assemble a personal "queue." This seemed to create an intelligent system that matches users with the movies they want to see. What wasn't to like?

In practice, though, Netflix users ended up watching fewer DVDs than they might have expected. (This is fine with Netflix; it saves on postage and boosts profits.) Why? One reason is that Netflix was forcing us to choose based on what we thought we wanted to see in the future—and we're bad at predicting our preferences.

There's a beautiful paper by Daniel Read and two coauthors showing the gap between what people want to do in principle and what they want to do right now. They asked subjects to choose several films from a list containing a mix of highbrow titles (e.g., *Schindler's List*) and lowbrow titles (e.g., *My Cousin Vinny*). When asked which film they wanted to watch a few days later, most picked a highbrow one. But when asked which they wanted to watch right now, most went lowbrow. In principle, we want to be the kind of people who watch serious movies, maybe even French ones—just not tonight! And so our queue becomes aspirational, filled with titles that are more ambitious than the ones we really want to watch.

Now that Netflix offers streaming, I've dropped the DVDs altogether. With streaming, we no longer get stuck with movies we only want to watch in theory. Instead, we feel like we're paying for the right to watch any movie at any time—even if we don't wind up watching many.

ZYNGA

A COUPLE OF YEARS AGO, I coauthored a paper about the way we value goods. My colleagues and I asked participants to make origami animals. Then we had them bid on their own creations, as well as on origami made by others, much of it clearly of higher quality than what the subjects could make. What we found was that participants placed an irrationally high value on their own creations—and that value was proportional to how long they had worked on it. We dubbed this the Ikea effect, in honor of how your rickety Swedish bookshelf seems perfect after you've put hours of frustrating labor into assembling it.

This is the most basic explanation for the appeal of Zynga's FarmVille and other social games. Once people take all the little steps to build a farm, they become invested in it—and thereby value it more highly. The more complex and difficult and time-consuming a process is, the more we fall in love with our creation and the more we become interested in the game.

The social element adds another kind of compulsion. A lot of the action in these games is about reciprocity: People give you useful things and you're expected to respond in kind. Economists have learned that reciprocity is an extremely powerful motivator. Ernst Fehr, in particular, has done groundbreaking work on what is called the trust game. In this game, one player is asked to choose between pocketing $10 or giving $40 to a second player—with the understanding that if he chooses the latter, the second player will get to choose between keeping all the money or splitting it 50-50 with the first one.

In rational terms, the second player should choose to keep it all—and knowing this, the first player should keep the $10. But when real people play, they're far more trusting and reciprocating than rationality would predict. When someone does us good, we want to return the favor, and in FarmVille that translates into spending more and more time playing the game.
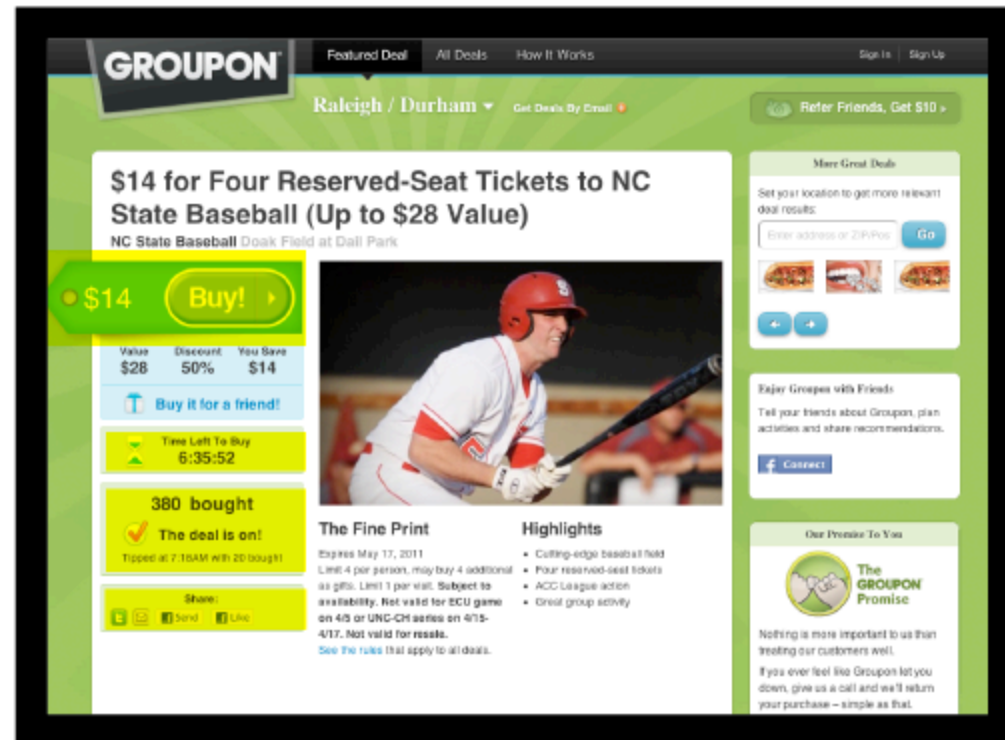
Groupon

To my mind, what's most revolutionary about social buying sites like Groupon isn't the hefty discounts they're able to offer. It's the fact that they've taken the embarrassment out of coupon shopping for their target demographic. Survey Groupon's customers about their views on clipping coupons from the newspaper and I suspect most of them would look down on it.

In fact, the stigma of coupon use is real and broad-based. A recent paper in the *Journal of Consumer Research* found that shoppers would describe people standing *near* coupon users, not to mention the coupon users themselves, as cheap or poor. With Groupon, by contrast, the social acceptability is baked into the premise—into the name, even.
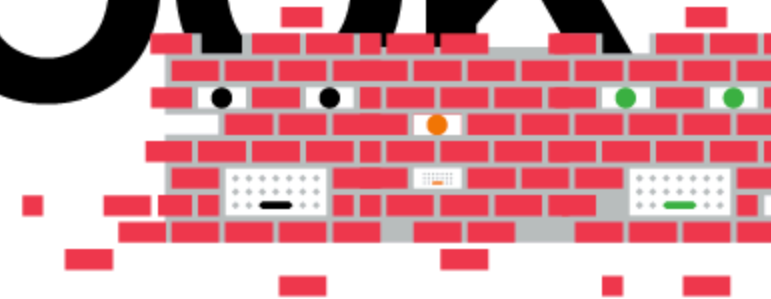
The perception of crowd behavior can be a powerful motivator when it comes to modifying people's behavior. UCLA's Noah Goldstein headed up a study a few years back on how to encourage towel reuse among hotel guests. In one experiment, two different signs were tested in rooms. The first was simply an ecological appeal saying that towel reuse is good for the environment; 35 percent of guests complied. The second sign added a social cue: "Almost 75 percent of guests who are asked to participate ... do help by using their towels more than once." The result: a jump to 44 percent compliance.

Groupon's time constraint is its other secret weapon. Consumers have just a day to decide whether to buy the coupon and lock in the discount. Usually, when we don't buy something, we don't eliminate the option to buy it if we change our mind—we can always go back and get it later. But with Groupon, our choice becomes explicit. It's not just that we're not buying the coupon; we're choosing never to be able to buy it in the future. Presented with that choice, many customers will consider how much they might regret the choice not to buy. And because people hate feeling regret, they become more inclined to buy it now.

FACEBOOK

I'M NOT EXACTLY PART of the Facebook generation, but I do have an account. More important, I teach 800 college students, almost all of whom use the site obsessively—often during class. A few have told me that before exam week, they log into Facebook, hand their computer to a friend, and ask the friend to change the password—and to keep the new one a secret from them until after exams. Watching the evolution of Facebook as a business, it seems clear that the company actively develops features that challenge our limited ability for self-control, since that is what will get us to come back again and again.

Much of Facebook's genius revolves around the Wall: a public space that we curate but that other people can add to. Within the universe of the site, where everyone is a "friend," you feel a special compulsion to respond to Wall posts—to comment on others' posts to yours and to reciprocate by writing on theirs.

We want our Walls to reflect ourselves. It's analogous to the way we curate our belongings, which itself is a window into our personalities. (The psychologist Sam Gosling has shown you can learn more about people from their possessions than from spending time with them. Walls are basically the same—a storefront window to the self.) Users want to display a self that is somewhere between their real self and how they would like to be perceived, which creates a substantial motivation for constant monitoring and upkeep of the Wall.

But perhaps Facebook's most addictive feature is that it allows us to enhance our status in ways that are relatively cheap. When Facebook started its now-defunct Gifts service, people asked why anyone would spend a dollar to send a virtual gift to a friend. But in the first 10 months of the program, more than 24 million gifts were sent. Why? Because we get tremendous social capital from being seen both as generous and as someone whom other people buy gifts for. In terms of status per dollar, it was a bargain.

Apple

If you're an Apple customer, you might have noticed something about your iTunes and App Store purchases: There's often a lag of hours, even days, before you get your receipts via email. This is probably because Apple is trying to batch-process your credit card transactions to reduce its interchange fees. But there's a fringe benefit for the company: The delay reduces what economists call the pain of paying.

Imagine I own a restaurant, and I calculate that a $20 entree contains 20 bites—a buck a bite. But I offer you a deal: I'll charge you 50 cents a bite, and you don't have to pay for what you don't eat; I'll just watch and count as you chew. It's a good deal, but how much fun will the meal be? Most of us would rather pay under the normal pricing structure, because when payment and consumption take place in the same time frame, we enjoy the experience much less. App Store purchases are like paying by the bite. But the mechanism of the transaction, where the money flows automatically from your credit card and you don't get a receipt until later, decouples payment from consumption and reduces the pain of paying.

While the delay in charging is good for Apple, the company made a mistake on pricing: It let the apps sell too cheap! There's an economic phenomenon called anchoring, in which the amount that shoppers are willing to pay is constrained, or anchored, by the first price presented to them. Once a price point is set, it's hard to dislodge the anchor. Many apps take a lot of work to design, but on the App Store, the expectation now is that they can't cost more than $4.99—and that most should cost $0.99.

How could Apple have avoided this? For starters, it shouldn't have allowed any apps to be free. Even a minimum price of 10 cents would have been better. The pull of free is just too strong—dragging down what people will pay for everything else.

How We're Gaming Ourselves

For some of the online world's compulsions, we have only ourselves to blame. Think about email: In the past few years, we've arrived at an equilibrium point where everyone expects everyone else to be on email all the time. For most people, this isn't a good thing. One of my friends, the business analytics expert Ken Rona, has shown that charging a nominal amount (5 cents per message) for email caused people to think more carefully about what they were writing and ultimately increased productivity in a significant way. But as with any other social norm, it's now hard for individuals to opt out. A while ago, I tried to read email only in the evenings, but pretty soon I found myself showing up for meetings that had been canceled 15 minutes beforehand.

How did we get to this point? Most of the emails we receive are useless to us, but paradoxically, that fact may be partly to blame for our feeling compelled to read them. In animal experiments, famed psychologist B. F. Skinner and his colleague C. B. Ferster showed that random reinforcement is far better than regular reinforcement in modifying behavior. If a pigeon gets food every 100th time it presses a button, it will usually keep pressing. But if the reward comes randomly—sometimes after 50 presses and sometimes after 150—the pigeon will press with much more vigor, even after the rewards are removed entirely. Email does something similar. From time to time we get a very important message, so when we see new mail waiting, we are compelled to read it in the hope it might be something wonderful, even though it usually winds up being unimportant.

We also let ourselves be gamed every day by one of the oldest technologies of all: the calendar. Because it displays our nonscheduled time as empty space, our calendar apps encourage us to pack our days with events. Think how differently we'd interact with our calendars if the default was for time slots not to be empty—if, instead, they were prepopulated with tasks like thinking, writing, and planning. We'd be far less likely to neglect the opportunity costs: Every time we accept an obligation, it would be clear that we are giving something up.

Another calendar problem is related to what behavioral economists Gal Zauberman and John Lynch call "resource slack." Their research has shown that when people estimate future time and money, we are overly optimistic about how much flexibility (slack) we'll have. But we're even more unrealistic about time than money. Lynch, who was my dissertation adviser, used to give me this advice: When someone asks you to do something in a year, ask yourself whether you'd accept if it were happening in the next two weeks. Based on our calendar, it looks as if we will have nothing to do a year from now. In reality, though, our typical week next year will look a lot like this week.

But until my calendar starts to simulate that, I'll likely keep surrendering my days to stuff I never should have scheduled.