

## Superhero comics as moral pornography

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Stories about good and evil are among the oldest stories told. These moral tales often describe a hero who struggles against the forces of evil in its various guises. In these stories, evil is often personified as an enemy for the hero to overcome. For instance, in the oldest work of literature known to exist, the Mesopotamian hero Gilgamesh battles a giant who has the face of a lion and whose “roar is a flood, his mouth is death, and his breath is fire” (Ferry, 1993).

Modern superhero comics (and the films they've inspired) are moral tales on steroids. While they present variations on the theme of good vs. evil, these stories describe individuals who commit moral deeds of global (and often cosmic) significance on a weekly basis. In this chapter we will argue that superhero comics, like other moralistic tales, are popular in part because they satisfy a basic human motivation: the motivation to divide the social world into good people and bad, and to morally praise and condemn them accordingly. In their modern superhero comic incarnation, however, these tales depict an exaggerated morality that has been stripped of its real-world subtlety. In tales of superhero vs. supervillain, moral good and moral bad are always the actions of easily identifiable moral agents with unambiguous intentions and actions. And it is these very qualities that make these stories so enjoyable. Much like the appeal of the exaggerated, caricatured sexuality found in pornography, superhero comics offer the appeal of an exaggerated and caricatured morality that satisfies the natural human inclination toward moralization. In short, the modern superhero comic is a form of “moral

pornography”—built to satisfy our moralistic urges, but ultimately unrealistic and, in the end, potentially misleading.

### **The paradoxical popularity of the supervillain**

Some things are so obvious that they require little explanation. Take the popularity of Superman: why *wouldn't* people want to have an invulnerable superhero on their side (let alone one who fights for truth and justice, saves lives in his spare time, and is a genuinely nice guy)? Perhaps the popularity of Superman seems obvious because heroic characters with superhuman abilities are so old and familiar. Or perhaps superheroes are so popular because they are a straightforward extension of “regular” heroes—who wouldn't like a “super” hero, capable of doing so much more than a normal one?

But the emergence of the comic book superhero gave rise to something a bit harder to explain—the unexpected popularity of the *supervillain*. This popularity is perplexing given what we know about human morality. After all, most individuals are not fond of immoral people, nor do they take pleasure in hearing about morally heinous acts. If anything, individuals actively avoid others with whom they disagree in the moral domain (Haidt, Rosenberg & Hom, 2001). Yet supervillains—who, by definition, are orders of magnitude more evil than any ordinary evildoer—are treated with fascination, curiosity, and delight. And the extent of their moral depravity seems linked to their popularity: In 2009, when the website IGN.com ranked the top comic book characters of all time, they began by publishing a list of top villains (“Top 100 Comic Book Villains of All Time,” 2009). Only a year later did they publish the equivalent list of superheroes.

Occupying the top positions were two of the most brutal characters in the history of comics: the Joker (a psychopathic, indiscriminate killer, who despite lacking any special powers has a body count that is among the highest of all comic book villains), and Magneto (the archenemy of the X-Men, whose disdain for the entire human race is responsible for the deaths of thousands). These supervillains are not just popular among people who visit websites about comics and attend comic conventions, either: the films that feature these villains (such as “The Dark Knight”) are among the most popular and highest grossing films of all time (“All Time World Box Office Grosses,” 2011). Why would people take such delight in following the stories of these monstrous characters (whose closest real-world analogs are individuals like Adolf Hitler and Pol Pot), let alone put their likeness on movie posters and on their children’s lunchboxes?

Perhaps supervillains are popular because superheroes, by themselves, are boring. A simple thought experiment illustrates this: imagine a world, like ours, where bad guys do bad things and good guys try to stop them. What would *really* happen if someone with superhuman abilities (someone who had super-human strength, the ability to control minds, or who could run at the speed of sound) were to suddenly appear? If this person chose to dedicate himself to preventing crime, regular criminals would stand little chance, crime would dwindle, and the story would be over. By introducing a powerful foe who can repeatedly test the hero’s mettle, however, the story remains interesting. Comic books are hardly the first instance of this phenomenon. Milton’s *Paradise Lost* was intended as a religiously inspiring poem, but the consensus

among critics over the centuries has been that the devil is the most interesting character, and the one with the best lines (Shawcross, 1998).

Supervillains serve as foils to keep the superheroes motivated. But while their convenience as a literary device may account for their regular presence in superhero comics, it cannot explain the degree of popularity they enjoy.

**The Power of Bad.** The fascinating appeal of supervillains is consistent with an important principle of psychology: Bad is stronger than good. A review article by Baumeister, Bratslavsky, Finkenauer, and Vohs (2001) examined dozens of findings and concluded that bad actions, events, emotions, and experiences routinely have greater psychological impact than good ones. Indeed, it was hard to find any exceptions to this principle. One recent source of evidence illustrates the psychological power of bad: while thinking about ourselves as moral agents can make us physically stronger, this effect is stronger when we imagine ourselves as committing acts of evil rather than good (Gray, 2010).

To be sure, life is generally good in peaceful, modern societies. But that is because there are far *more* good things than bad. Successful marriages, for instance, are characterized by the presence of at least five good interactions for every bad one – the so-called “Gottman Ratio” (for a discussion, see Baumeister et al., 2001). Applying this ratio—five units of “good” required for every one unit of “bad”—to the universe of comic books would mean that for “good” to prevail, it would require presence of about five or six superheroes for every supervillain. That might be more realistic, but it would

hardly make for thrilling reading. Readers like to see the lone superhero defeating swarms of bad guys.

Thus, the high success rate of superheroes in defeating supervillains, in issue after issue of comic book after comic book, is wildly implausible. Moreover, even if their powers were evenly matched, the heroes would be constrained by scruples (not initiating the fight, not killing) and concerns (not endangering innocent bystanders) that would not deter the villains. In reality, a 40% victory rate by superheroes would be impressive. In the comics, however, the good guys win almost every time. Comic books provide a satisfying escape—by giving us a universe in which good is stronger than bad.

This is one sense in which the term “moral pornography” is an apt description of comic book morality—it is characterized by an unrealistically high rate of desired outcomes. Consumers of pornography are mostly young and middle-aged men, whose lives are often characterized by getting much less sex than they desire (see Baumeister, Catanese, & Vohs, 2001). To get even a small part of the sex they would like to have, they have to make many attempts and endure many rejections. But in pornography, the odds are quite different. Most of the women are eager and willing, and the desired outcome – great sex – is almost always obtained (an unlikely occurrence for most young men). Similarly, the rate of success is unrealistically lopsided in the world of superhero comics, where heroes almost always win the battle against the supervillains.

**Moral Shadowboxing.** Another explanation for the popularity of supervillains is that they provide people with the ability to exercise their moral faculties—identifying the

bad guy, knowing why he does what he does, and condemning his actions. Taking part in this mock moral judgment appears to be intrinsically enjoyable. Yet while comic book supervillains might be easier to spot (even if you are unfamiliar with comic books, you probably wouldn't invite a guy wearing a metal mask and calling himself "Dr. Doom" on your family vacation), people have been deriving pleasure from jeering fictional villains for quite some time. It was not uncommon, for instance, for moviegoing audiences of the past to boo and hiss loudly whenever the villain appeared onscreen. Early filmmakers even did their part in facilitating this behavior by providing obvious cues for audiences to identify the villain. Even before committing his villainous deeds, the villain could be seen twirling his mustache, cackling, and rubbing his hands together (Senn, 1996). In Westerns, a similar custom emerged: black hats and white hats marked the bad cowboy and good cowboy, respectively. Even in modern films, telling the heroes apart from the villains is much easier than doing so in real life (Darth Vader, arguably the most famous movie villain in cinematic history, is also one of the most recognizably evil).

Serious literature went through a similar development. In medieval theatre, evil was represented by characters who were named or physically labeled with their vices. There was no mistaking them. But during the early modern period (1500-1800), theatre came to feature villains in a new sense. These were characters who were soon recognized by the audience as evil but not by the other characters in the play. Often much of the suspense of the play was based on whether the protagonists would discover the wicked schemes and actions of the villains before it was too late (Trilling, 1971). Later, such overtly wicked characters were dismissed from serious literature as

not being sufficiently realistic. But their perennial popularity in comic books is indicative of the appeal of moral clarity.

But this is only part of the story—what needs explaining is *why* people seem to get such pleasure from engaging in the moral exercise of identifying and jeering the bad guys. This is where recent psychological research can shed light: individuals likely find this behavior pleasurable because it turns out to be good for them.

### **Why Morality?**

In order to understand why people seem to enjoy judging and hating supervillains, it helps to understand a bit more about the nature of human morality. It is increasingly evident that morality is deeply ingrained in human psychology. It was once believed, however, that human morality was only a result of acculturation and an ability individuals possess to override humanity's basic, immoral nature. This view was thought to be consistent with the theory of natural selection, which appeared to have little room for morality, but that portrayed human beings as survival machines driven by egoistic interests. This is no longer a very popular view. Research converging from a wide variety of disciplines, spanning from evolutionary biology to social psychology, is converging on the view that morality is not inconsistent with what scientists know about evolution by natural selection, but that evolution may have favored individuals who had basic moral intuitions and motivations, such as a desire to act cooperatively and altruistically (Axelrod & Hamilton, 1981; Trivers, 1971). For instance, researchers believe that human altruism likely emerged as a result of two evolutionary mechanisms: kin selection (a willingness to act altruistically toward members of one's immediate gene



pool) and reciprocal altruism (a willingness to act for the benefit of others when there is a chance that the organism will be paid in kind). Together, these mechanisms would have encouraged altruistic behavior, likely by giving rise to the presence of certain moral emotions, such as empathy for the suffering of others or anger over being cheated (Frank, 1988). The understanding that morality is not inconsistent with the process of evolution represented a large step toward understanding the nature of human morality. In particular, it paved the way toward understanding just how fundamental morality is to human psychology.

A great deal of research from the fields of social psychology, developmental psychology, and social/cognitive neuroscience is providing additional evidence that humans are, in some ways, “hardwired” to be ethical creatures. Obviously, this does not mean that genes drive people to engage in ethically impeccable behavior, but only that people are innately prepared to learn to make and understand moral judgments.

For instance, there is a great deal of evidence that individuals have a basic and strong aversion to being treated unfairly. In studies that investigate fairness in a laboratory setting by having individuals participate in an economic game in which they are asked to engage in a financial exchange with a partner, one of the most reliable findings is the strength of people’s reactions to being treated in a way they perceive to be unfair—so much so that they are willing to incur a financial cost just so to punish the unfair agent. People enjoy being treated fairly, and become distressed when treated unfairly. While decades of behavioral research support this conclusion, recent research has demonstrated this at a neurological level: areas of the brain associated with pleasure and reward are active when individuals receive fair treatment, and areas of the

brain associated with pain and distress are active when they are treated unfairly (Tabibnia, Satpute, & Lieberman, 2008; Sanfey, Rilling, Aronson, Nystrom, & Cohen, 2003). In short, we experience pain and pleasure as a reaction to the moral behavior of others.

Another feature of morality that seems to be deeply entrenched in human psychology is the motivation to morally evaluate others. This makes sense, as few tasks are as important as figuring out who the good guys and the bad guys are in everyday life. Being skilled at distinguishing a potential friend from a potential foe likely provided a clear benefit for the survival, reproduction, and social success of an individual who lived in a socially complex environment (Gintis, Henrich, Bowles, Boyd, & Fehr, 2008). Having the ability to accurately assess moral traits (such as trustworthiness, loyalty, and compassion) from a limited set of observations would have provided a real advantage to our ancestors, as would the ability to keep track of people who possessed those traits over extended periods of time. These abilities would help an individual avoid cheaters, psychopaths, and murderers, and also provide the benefits that come from being surrounded by trustworthy, loyal, and cooperative individuals.

If the ability to evaluate individuals on the moral dimension provided such a tangible evolutionary benefit, we would expect to find that the tendency to make such evaluations is a basic, universal feature of human psychology. There is growing evidence that it is. A great deal of research in social psychology has demonstrated that individuals easily arrive at conclusions about the dispositions of others (and are motivated to so) with only minimal information (Gilbert & Malone, 1995; Gilbert, 1998). This appears especially true for those qualities associated with moral character. Within

seconds of meeting a stranger people make judgments about whether she is trustworthy (Bar, Neta, & Linz, 2006; Todorov, Said, Engell & Oosterhof, 2008). The tendency to make these moral evaluations appears to be common in individuals across various cultures (Fiske, Cuddy, & Glick, 2007), and emerges very early in life (Hamlin, Wynn, & Bloom, 2007; Kuhlmeier, Wynn, & Bloom, 2003).

Moreover, individuals continue evaluating others on the moral dimension beyond this initial assessment by using a variety of methods. For instance, people infer the presence of moral traits by observing the emotional reactions and displays of others (Ames & Johar, 2009; Frank, 1988), and acquire information about the presence (and absence) of moral traits by gossiping about others (Foster, 2004). In short, people appear motivated to use whatever information might be relevant in order to glean information about the underlying moral traits of others (for a review see Pizarro & Tannenbaum, in press).

One reliable way of acquiring this information is by acquiring information about an individual's reputation—learning what is already known about a person's previous actions and whether or not they can be trusted. This is likely one of the basic motivations behind the fairly universal practice of gossip (e.g., Baumeister, Zhang, & Vohs, 2004). Researchers have shown that the ability and motivation to keep track of others' reputations are predictive of success in economic games designed to mimic the basic features of social interaction over time (e.g., Rand, Dreber, Ellingsen, Fudenberg & Nowak, 2009). In addition, research has shown that individuals display a moral memory bias—individuals are more likely to remember the faces of individuals who

cheated them unexpectedly in an economic game (or who helped us unexpectedly; Chang & Sanfey, 2009). In short, the motivation to evaluate others on a moral dimension appears to be a fundamental characteristic of human social cognition, and for good reason.

The growing evidence for this moral motivation to evaluate others offers another explanation for the popularity of the supervillain, then. The fact that human beings are motivated to identify and condemn the bad guy is consistent with the fact that doing so may be a fundamentally pleasurable endeavor. This, after all, is how motivation works for behaviors in the service of many basic human needs, such as eating, sleeping, and having sex. Individuals do not engage in these behaviors out of an explicit, dispassionate calculation that these actions are required to survive and reproduce. Rather, people engage in them because they find them to be intrinsically pleasurable. Making an adaptive behavior feel good is one of the most efficient ways in which evolution serves the interests of the organism's genes. Take sex: natural selection likely favored individuals who found sex to be intrinsically pleasurable, and who were motivated to seek sexual pleasure with little contemplation about its reproductive consequences. After all, if individuals considered the pros and cons of their actions each time they engaged in sex, it is very possible that the rates of human reproduction would be far smaller.

Similarly, the pleasure individuals derive from the exercise of moral judgment—even for fictional characters—may be a result of the advantages provided by possessing the deep motivation to morally evaluate others. And supervillains, who

possess a set of exaggerated moral features that make them especially easy to identify and condemn as evil, may have become popular because they push all the right moral buttons (much like individuals prefer the taste of sugary, fatty foods, because they are exaggerations of the naturally-occurring cues that a food is safe and nutritious). Such moral exercises are even more likely to be pleasurable given that distinguishing between good guys and bad guys with any real accuracy in the real world is challenging, while in the fictional worlds of superheroes and supervillains it is trivially easy.

### **Moral Caricatures**

Unfortunately, the instant moral satisfaction these stories provide is not likely to be of any real help in real-world moral evaluation. The characterizations of good and evil that comic book readers find so entertaining are, in the end, gross caricatures that hopelessly distort the real nature of immorality in everyday life. Unlike in superhero comics, the presence of evil in real life is not marked by the presence of loud, unambiguous cues. Real evildoers are not especially prone to dress in black, rub their hands excessively, or twirl their mustaches. And the greatest evils in the world are likely committed as a result of the collective action or inaction of groups of individuals, often out of ignorance or even idealistic aspirations, rather than as the fulfillment of a single individual's evil plan (e.g., Baumeister, 1997). One of the central insights gained from decades of social psychological research is that even when a single agent commits an evil deed, it is often a normal person acting under the pressure of a particular situation. This insight is nicely summarized in an unlikely source—an article outlining tips for

aspiring writers. In the article, the author exhorts the would-be writer to avoid the use of caricatured villains in their writing, while offering as good a summary on the psychology of evil as has been made by any social psychologist:

“In the real world there are no villains. No one actually sets out to do evil. Yes, there are madmen and murderers and rapists and crooked politicians and greedy land developers and all sorts of villainous behaviors. But each of those people believes that he is doing what is necessary, and maybe even good... There are no villains cackling and rubbing their hands in glee as they contemplate their evil deeds. There are only people with problems, struggling to solve them.” (Bova, n.d.)

This insight represents a shift in our understanding of evil. As Baumeister (1997) points out, the fact that most people who do evil do not regard themselves or their actions evil leads to the importance for social scientists to move away from the question of evil in its classic form (“why does evil exist?”), and towards a different set of questions, such as understanding the situational forces that allow normal people to act in ways that many would consider evil.

Comic-book-style images of evildoers, in the end, make this task difficult. They may likely make people even less likely to recognize actual evildoers in their midst. After all, the real bad guys never resemble the images from the Batman movies.

### **Conclusion: Moral Pornography**

We have used this chapter and its discussion of comic books to articulate a quietly radical idea. The history of moral psychology has focused relentlessly on judgments of particular actions, from the widely used vignette about whether it is right

for Heinz to steal the medicine to save his wife's life, to the recent fascination with the problem of whether it is right to change the course of a runaway trolley so as to save five lives, even if that means that one (different) person will be killed (Pizarro & Tannenbaum, in press).

Against that heavy focus on actions, we suggest that moral judgment is about judging *people*. Establishing the moral character of particular individuals is a vitally important feature of everyday life and can have immense practical significance, one that potentially affects our survival. Deciding whether someone's action was morally right or wrong is itself of little importance, insofar as the act lies in the past and cannot be changed. But knowing the moral character of a person is useful for predicting that person's future behavior, which carries a host of implications regarding how to act vis-à-vis that person from now on.

Indeed, if there is any innate predisposition to make moral judgments, then its evolutionary basis must have been by facilitating survival and reproduction—for which predicting the future of interaction partners is far more relevant than passing judgment on their past actions. Hence as theorists have begun to consider evolutionary bases for moral judgment, we think they will have to begin to focus more on judging people than judging actions.

Judging people and predicting their future actions is hard. The most violent criminals are violent in only a tiny fraction of their behaviors. (Indeed, the highest frequencies of physical violence are still limited to about 25% of interactions — and these rates are found only among two-year-old children! See Tremblay, 2000, 2003;

Tremblay et al., 2004.) So-called liars tell the truth most of the time. Hence, perhaps the hugely skewed bias in moral judgment, which boldly makes strong inferences about moral character and predictions about future behavior based on only a small number of immoral actions. Yet of course such prediction is tricky. Someone who lied once may be labeled a “liar” but might just tell the truth from then on.

It is no wonder, then, that the supervillain fascinates. Magneto and his so-called “Brotherhood of Evil Mutants” present no morally ambiguous cases or difficulties in knowing what to expect. They do bad things (and enjoy them) routinely. Their past actions are a reliable guide to their future actions.

We have described comic books as moral pornography. The term pornography is, of course, borrowed from the domain of sexuality. One interesting feature is the striking gender differences in the rates in which pornography is consumed. In one recent study, for instance, a little fewer than 14% of women (in a sample of young adults aged 18-30) reported that they had viewed pornography in the past week. For men, that number was 63% (Hald, 2006). This may come as no surprise—most young men want more sex than they get, thanks in part to the greater male than female desire for sex (Baumeister, Catanese, & Vohs, 2001). Many invest considerable time, energy, and money in courting a desired woman, despite a high likelihood that she will end up refusing his sexual advances. But there is no alternative: they cannot know in advance whether their investment will lead to sex. The world depicted in pornography, in which the female characters are typically willing and often eager to have sex — and usually without requiring the man to make extensive investments of time, energy, and money—



thus offers great appeal to men (much more so than to women, as evidenced by their rates of consumption).

Likewise, we have suggested that the real world is one in which bad is stronger than good. When the two clash on equal grounds, bad tends to win because of its greater power (and can be defeated only when greatly outnumbered). But the satisfaction of superhero comics comes from their depiction of a universe in which good is stronger than bad: a universe in which superheroes—even when outnumbered—win almost every time. Just as sexual pornography depicts a world where the desired outcomes occur reliably and the difficulties and ambiguities of actual life are pleasantly and effortlessly absent, comic books depict a world where desired outcomes occur reliably (good triumphs over evil) and the difficulties and ambiguities of moral prediction are absent.

## References

- All Time World Box Office Grosses. (2011). Retrieved July 17, 2011 from <http://boxofficemojo.com/alltime/world/>
- Ames, D. R., & Johar, G. V. (2009). I'll know what you're like when I see how you feel. *Psychological Science, 20*, 586-593.
- Axelrod, R., & Hamilton, W. D. (1981). The evolution of cooperation. *Science, 211*, 1390–1396.
- Bar, M., Neta, M., & Linz, H. (2006). Very first impressions. *Emotion, 6*, 269-278.
- Baumeister, R.F. (1997). *Evil: Inside Human Violence and Cruelty*. New York: W.H. Freeman.
- Baumeister, R.F., Bratslavsky, E., Finkenauer, C., & Vohs, K.D. (2001). Bad is stronger than good. *Review of General Psychology, 5*, 323-370.
- Baumeister, R.F., Catanese, K.R., & Vohs, K.D. (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, 5*, 242-273.
- Baumeister, R.F., Zhang, L., & Vohs, K.D. (2004). Gossip as cultural learning. *Review of General Psychology, 8*, 111-121.
- Bova, B. (n.d.). Tips for writers. Retrieved from <http://benbova.com/tips2.html>.
- Chang, L. J., & Sanfey, A.G. (2009). Unforgettable Ultimatums? Expectation violations promote enhanced social memory following economic exchange. *Frontiers in Behavioral Neuroscience, 3*, 1-12.

- Ferry, D. (1993). *Gilgamesh: A New Rendering in English Verse*. New York: Farrar, Straus and Giroux.
- Fiske, S. T., Cuddy, A. J. C., & Glick, P. (2007). First judge warmth, then competence: Fundamental social dimensions. *Trends in Cognitive Sciences*, *11*, 77-83.
- Frank, R. H. (1988). *Passions within Reason: The Strategic Role of the Emotions*. New York: Norton.
- Foster, E. K. (2004). Research on gossip: Taxonomy, methods, and future directions. *Review of General Psychology*, *8*, 78-99.
- Gilbert, D. T. (1998). Ordinary personology. In D. T. Gilbert, S. T., Fiske, & G. Lindzey (Eds.) *The handbook of social psychology (4th edition)*. New York: McGraw Hill.
- Gilbert, D. T., & Malone, P. S. (1995). The correspondence bias. *Psychological Bulletin*, *117*, 21–38.
- Gintis, H., Henrich, J., Bowles, S., Boyd, R., & Fehr, E. (2008). Strong reciprocity and the roots of human morality. *Social Justice Research*, *21*, 241-253.
- Haidt, J., Rosenberg, E., & Hom, H. (2003). Differentiating diversities: Moral diversity is not like other kinds. *Journal of Applied Social Psychology*, *33*, 1-36.
- Hald, G.H. (2006). Gender differences in pornography consumption among young heterosexual Danish adults. *Archives of Sexual Behavior*, *35*, 577–585.
- Hamlin, J. K., Wynn, K., & Bloom, P. (2007). Social evaluation by preverbal infants. *Nature*, *450*, 557-559.
- Kuhlmeier, V., Wynn, K., & Bloom, P. (2003). Attribution of dispositional states by 12-month-olds. *Psychological Science*, *14*, 402-408.

- Miller, G. F. (2007). Sexual selection for moral virtues. *Quarterly Review of Biology*, *82*, 97-125.
- Pizarro, D.A. & Tannenbaum, D. (in press). Bringing Character Back: How the Motivation to Evaluate Character Influences Judgments of Moral Blame. For inclusion in M. Mikulincer & Shaver, P. (Eds) *The Social psychology of morality: Exploring the causes of good and evil*. APA Press.
- Rand D. G., Dreber A., Ellingsen, T., Fudenberg, D., & Nowak M.A. (2009). Positive interactions promote public cooperation. *Science*, *325*, 1272-1275.
- Sanfey, A. G., Rilling, J. K., Aronson, J. A., Nystrom, L. E., & Cohen, J. D. (2003). The neural basis of economic decision-making in the Ultimatum Game. *Science*, *300*, 1755–1758.
- Senn, B. (1996). *Golden Horrors: An Illustrated Critical Filmography of Terror Cinema, 1931–1939*. McFarland & Company.
- Shawcross, J.T. (1998). An Early View of Satan as Hero of Paradise Lost, *Milton Quarterly*, *32*, 104-105.
- Tabibnia, G., Satpute, A. B., & Lieberman, M. D. (2008). The sunny side of fairness: Preference for fairness activates reward circuitry (and disregarding fairness activates self-control circuitry). *Psychological Science*, *19*, 339–347.
- Todorov, A., Said, C. P., Engell, A. D., & Oosterhof, N. N. (2008). Understanding evaluation of faces on social dimensions. *Trends in Cognitive Sciences*, *12*, 455-460.

- Top 100 Comic Book Villains of All Time. (2009). Retrieved July 17, 2011 from <http://comics.ign.com/top-100-villains/index.html>.
- Tremblay, R. E. (2000). The development of aggressive behavior during childhood: What have we learned in the past century? *International Journal of Behavioral Development, 24*, 129-141.
- Tremblay, R.E. (2003). Why socialization fails?: The case of chronic physical aggression. In B.B. Lahey, T. E. Moffitt, & A. Caspi (Eds.), *The causes of conduct disorder and serious juvenile delinquency* (pp. 182-224). New York: Guilford Press.
- Tremblay, R.E., Nagin, D.S., Sguin, J.R., Zoccolillo, M., Zelazo, P.D. Boivin, M., Prusse, D., & Japel, C. (2004). Physical aggression during early childhood. Trajectories and predictors. *Pediatrics, 114*, e43-e50.
- Trilling, L. (1971). *Sincerity and authenticity*. Cambridge, MA: Harvard.
- Trivers, R. L. (1971). The evolution of reciprocal altruism. *Quarterly Review of Biology, 46*, 35-57.
- Willis, J., & Todorov, A. (2006). First impressions: Making up your mind after 100 ms exposure to a face. *Psychological Science, 17*, 592-598.