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## How the Illusion of Being Observed Can Make You a Better Person

Even a poster with eyes on it changes how people behave

May 3, 2011 | By Sander van der Linden

Many years ago, when I was still in high school, I was extremely fond of chewing gum, especially during class hours. However, sooner or later the chewing gum would either lose its taste or I would become bored with it. After a while, I would start looking around, wondering how I could get rid of the gum nice and quietly. As you might have guessed by now, yes, I was that kid sticking his used gum underneath the desk. And as I grew older, I started noticing that I wasn't the only one deviating from the social norms that society has laid out for us. How often is it that we conveniently forget to return dirty food



Image: Eva Serrabassa

trays in the cafeteria? Or let our dogs poop in the park and head off before anyone has a chance to notice?

I think Thomas Jefferson was on a similar train of thought when he wrote, "Whenever you do a thing, act as if all the world were watching." I always found this to be a particularly interesting quote, as it reminds us of the fact that we tend to be on our best behavior when we know that we are being observed. While this may seem obvious, new research points to something far less obvious: it doesn't take a fellow human being to make us feel "as if the world were watching," not even another living organism. All it takes is an image of a pair of human eyes.

A group of scientists at Newcastle University, headed by Melissa Bateson and Daniel Nettle of the Center for Behavior and Evolution, conducted a field experiment demonstrating that merely hanging up posters of staring human eyes is enough to significantly change people's behavior. Over the course of 32 days, the scientists spent many hours recording customer's "littering behavior" in their university's main cafeteria, counting the number of people that cleaned up after themselves after they

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In fact, this research builds on a long tradition of psychologists being interested in explaining and stimulating human cooperation in matters of the collective. In technical terms, we often speak of a "social dilemma," that is, a situation where personal interests are at odds with that of the collective. (For example, it would be easier for me to throw my trash on the ground, but if everyone thought that way, we would all be stuck with a huge pile of waste.) Robyn Dawes and colleagues showed in the 70's that the presence of other people in the room tends to have a positive effect on people's decision-making when faced with a social dilemma. Yet, it wasn't until a few years ago that Terence Burnham and Brian Hare published an article in Human Nature that showed people make more cooperative choices in economic computer games when they are "watched" on the screen by a robot with human-like eyes. Somewhat baffled, a number of researchers subsequently conducted a set of experiments that confirmed these initial findings.

Ernest-Jones, Bateson and Nettle sought to better understand the effect of staring-eyes on behavior. Part of the added value of the scientist's current research is that the results were generated outside of the laboratory. This is important because it allowed the researchers to document naturally occurring behavior, providing greater confidence that the results obtained are not merely an artefact of experimentation. Equally important, it also served to illustrate that the effect of staring-eyes carries across a range of social behaviors.

While the researchers have convincingly illustrated that displaying a mere image of human eyes is sufficient to actually alter real-life social behavior, the real question is how. Humans (and other animals) have a dedicated neural architecture for detecting facial features, including the presence of eyes. This built-in system, also known as "gaze detection," served as an important evolutionary tool in ancestral environments (e.g. for detecting lurking enemies). Furthermore, the ability to function in social situations hinges on our ability to exploit social information provided by the expressions of the faces and eyes of others. What's interesting is that this system largely involves brain areas that are not under voluntary control. Experiments have shown that people are unable to inhibit responses to gaze even when instructed to. This makes sense, because there is great evolutionary value in being able to quickly assess whether any predators are on the prowl; neural activation of the gaze detection system is fast and automatic. Yet this also means that it's possible to "trick" the system and this is exactly what the new experiment has shown: objects that merely resemble human eyes are sufficient to trigger human gaze detection and subsequently alter social behavior.

These research findings are not just food for theory. Supermarkets could use cameras in the form of "blinking eyes" as a means to reduce theft, and quiet, unsafe areas might benefit from displaying pictures of human eyes. And perhaps images of angry looking eyes will also help schools win their battle against those rascals who stick used gum underneath school property.

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