## The Imp of the Perverse

Edgar Allan Poe once wrote a short story called "The Imp of the Perverse," about a man who gets away with murder only to blurt out his secret later in the presence of a police officer. His confession is not merely a slip of the tongue. The murderer has no wish to confess – "Could I have torn out my tongue, I would have done it" – but he literally can't stop himself: "The long-imprisoned secret burst forth from my soul." Poe declared that such an impish impulse sometimes causes all of us to "act, for the reason that we should *not*."

Now David Wegner, a Harvard psychologist, has proposed a mechanism for how this imp works. In an article titled, "How to think, say, or do precisely the worst thing for any occasion." Wegner describes an "ironic process" that operates when we try to suppress a thought. He and colleagues have studied how people respond to instructions to *not think about a specific thing* (e.g., "Do not think about a white bear"). As people try to suppress such a thought it pops back into consciousness at the rate of about once a minute and keeps popping up occasionally for days. When subjects are asked about how they respond to this instruction, they typically report trying to *put their minds on something else*. This strategy sort of works because the mind can't hold two thoughts in consciousness at the same time. Wegner points out however that in order to keep a particular thought out of mind there has to be a mechanism to detect that very thought so as to screen it. He defines this ironic process "an unconscious search for the very mental state that is unwanted."

So in order to not think about a white bear there are two mental processes going on at the same time:

- 1) a conscious search for distracters, and
- 2) an unconscious search for "white bear."

It turns out that trying to control conscious thoughts and unconscious impulses at the same time takes a lot of mental effort, which makes the control system prone to errors. The "imp" arises when the control system becomes stressed, overloaded, or distracted. At such times conscious control loosens and the unconscious thought or impulse pops out.

Wegner has studied how such impish thoughts or images leak out. For example, in laboratory experiments people instructed not to think about sex show greater arousal to sexual images than people who are given no instructions. In another experiment, people rated past romances that were secret as more arousing than those romances which were not secret. In another lab experiment, persons instructed to keep one item out of four on a table hidden from a partner were more likely to let it show than those not so instructed. Research with people who have eating disorders found that those who were trying not to disclose their eating disorder during an interview later reported more intrusive thoughts about eating than persons who were not trying to hide their eating disorder. These ironic processes are also influenced by our social biases. British subjects instructed to suppress

their feelings about white supremacists actually moved their chairs farther away from "skinheads" in the groups they attended than those not given any instructions.

Athletic performance is also affected by these processes. Studies of golfers have shown that they are more likely to overshoot when instructed not to do so. Soccer players directed not to direct a penalty shot to a certain corner of the net focus their gaze on that very spot. Even a simple motor task such as holding a weight by a string is affected by this ironic process. People instructed to avoid making the weight swing a particular direction frequently swing the pendulum in that very direction. The effect is more pronounced when the subject is distracted by counting backwards at the same time.

Worrying is also an example of the ironic process. Try putting a worry out of your mind when you are tired. Try forcing yourself to go to sleep when you have a "big day tomorrow." Try not thinking about an itch after you have noticed it. Each of these tasks is made harder the more you try not to focus on it.

Wegner points out that ironic processes do not usually control our lives, and most of the time we do just fine suppressing unwanted impulses, emotions, thoughts, and sensations. It is only when we are stressed out, overloaded, or distracted, that the control breaks down and we become like Poe's murderer, perversely thinking about or doing the very thing we are trying to stop. At such times we would probably do better to stop trying so hard to control our thoughts and/or impulses, as the urge to control them adds to the stress that lowers our control.

Wegner, D. 2009. How to think, say, or do precisely the worst thing for any occasion. *Science, Vol. 325* Pages 48-50.