



macbeth

and the

science  
of  
EVIL

June 6, 2011

# ‘The Science of Evil’

By SIMON BARON-COHEN

Explaining “Evil” and Human Cruelty

When I was seven years old, my father told me the Nazis had turned Jews into lampshades. Just one of those comments that you hear once, and the thought *never goes away*. To a child’s mind (even to an adult’s) these two types of things just don’t belong together. He also told me the Nazis turned Jews into bars of soap. It sounds so unbelievable, yet it is actually true. I knew our family was Jewish, so this image of *turning people into objects* felt a bit close to home.

My father also told me about one of his former girlfriends, Ruth Goldblatt, whose mother had survived a concentration camp. He had been introduced to the mother and was shocked to discover that *her hands were reversed*. Nazi scientists had severed Mrs. Goldblatt’s hands, switched them around, and sewn them on again so that if she put her hands out palms down, her thumbs were on the outside and her little fingers were on the inside. Just one of the many “experiments” they had conducted. I realized there was a paradox at the heart of human nature—people could objectify others—that my young mind was not yet ready to figure out.

Years later I was teaching at St Mary’s Hospital Medical School in London. I sat in on a lecture on physiology. The professor was teaching about human adaptation to temperature. He told the students that the best data available on

human adaptation to extreme cold had been collected by Nazi scientists performing “immersion experiments” on Jews and other inmates of Dachau concentration camp, whom they put into vats of freezing water (see Figure 1). They collected systematic data on how heart rate correlated with duration of time in the water at zero degrees centigrade. Hearing about this unethical research retriggered that same question in my mind: How can humans *treat other people as objects*? How do humans come to switch off their natural feelings of sympathy for another human being who is suffering?

These examples are particularly shocking because they involve educated doctors and scientists (professions we are brought up to trust) performing unethical experiments or operations. Let’s assume (generously) that these doctors were not being cruel for the sake of it—that the scientists doing the immersion experiments wanted to contribute to medical knowledge, to know, for example, how to help victims rescued after being shipwrecked in icy seas. Even the Nazi doctors who had sewn poor Mrs. Goldblatt’s hands back to front may not (I assume) have been motivated to do cruel things for cruelty’s sake: They, too, were presumably following their scientific impulse, wanting to understand how to test the limits of microsurgical procedures.

What these scientists lost sight of, in their quest for knowledge, was the humanity of their “subjects.” It is an irony that the human sciences describe their object of study as “subjects” because this implies sensitivity to the feelings of the person being studied. In practice, the feelings of the subjects in these experiments were of no concern. Nazi laws defined Jews as genetically subhuman and ordered their extermination as part of the eugenics program of the time. Within this political framework, “using” the inmates of concentration

camps as “subjects” in medical research might even have seemed to these doctors to be ethical if it contributed knowledge for the greater good.

Cruelty for its own sake *was* a part of ordinary Nazi guards’ behavior. Sadly, there is no shortage of horrific examples, but I have selected just one from the biography of Thomas Buergenthal. At just nine year old, Thomas was rounded up with thousands of Jews and taken to Auschwitz. There he had to watch while an inmate was forced to hang his friend who had tried to escape. An SS guard ordered the inmate to put a noose around his friend’s neck. The man couldn’t fulfill the order because his hands were shaking so much with fear and distress. His friend turned to him, took the noose, and, in a remarkable act, kissed his friend’s hand and then put the noose around his own neck. Angrily, the SS guard kicked the chair away from under the man to be hanged.

Nine-year-old Thomas and the other inmates, watching the man kissing his friend’s hand, rejoiced at that simple act that said (without words) “I will not let my friend be forced to kill me.” Thomas survived Auschwitz (perhaps because his father taught him to stand close to the shed when Dr. Mengele was making his selection of who would die) and described this story in his book *A Lucky Child*. The empathy within the friendship comes through so powerfully in this awful situation, as does the extreme lack of empathy of the guard. If the aim was to punish or to set an example, the guard could have just shot the escapee himself. Presumably, the guard chose this particular form of punishment because he *wanted* the two friends to suffer.

Today, almost half a century after my father’s revelations to me about the extremes of human behavior, my mind is still exercised by the same, single question: How can we understand human cruelty? What greater reason for

writing a book than *the persistence of a single question* that can gnaw away at one's mind all of one's conscious life? What other question could take root in such an unshakeable way? I presume the reason I find myself returning to this question again and again is because the question of how human beings ignore humanity of others *begs* an answer—yet answers are not forthcoming. Or at least, those answers that are available are in some way unsatisfying. If the answers were sufficient, the question would feel as if it had been answered and the matter settled. There would be no need to restlessly and repeatedly return to it. Clearly, better answers are still needed.

The standard explanation is that the Holocaust (sadly, as we shall see, echoed in many cultures historically across the globe) is an example of the “evil” that humans are capable of inflicting on one another. Evil is treated as incomprehensible, a topic that cannot be dealt with because the scale of the horror is so great that nothing can convey its enormity. The standard view turns out to be widely held, and indeed the concept of evil is routinely used as an explanation for such awful behaviors:

Why did the murderer kill an innocent child? Because he was evil.

Why did this terrorist become a suicide bomber? Because she was evil.

But when we hold up the concept of evil to examine it, it is no explanation at all. For a scientist this is, of course, wholly inadequate. What the Nazis (and others like them) did was unimaginably terrible. But that doesn't mean we should simply shut down the inquiry into how people are capable of behaving in such ways or use a nonexplanation, such as saying people are simply evil.

As a scientist I want to understand what causes people to treat others as if they were mere objects. In this book I explore how people can treat each other cruelly not with reference to the concept of evil, but with reference to the concept of *empathy*. Unlike the concept of evil, empathy has explanatory power. In the coming chapters I put empathy under the microscope.

## **Turning People into Objects**

The challenge is to explain, without resorting to the all-too-easy concept of evil, how people are capable of causing extreme hurt to one another. So let's substitute the term "evil" with the term "empathy erosion." Empathy erosion can arise because of corrosive emotions, such as bitter resentment, or desire for revenge, or blind hatred, or a desire to protect. In theory these are transient emotions, the empathy erosion reversible. But empathy erosion can be the result of more permanent psychological characteristics.

The insight that empathy erosion arises from people *turning other people into objects* goes back at least to Martin Buber, an Austrian philosopher who resigned his professorship at the University of Frankfurt in 1933 when Adolf Hitler came to power. The title of Buber's famous book is *Ich und Du* (I and Thou). He contrasted the *Ich-Du* (I-you) mode of being (where you are connecting with another person as an end in itself) with the *Ich-Es* (I-it) mode of being (where you are connecting with a person or object, so as to use them for some purpose). He argued that the latter mode of treating a person was devaluing.

When our empathy is switched off, we are solely in the "I" mode. In such a state we relate only to things or to people as if they were just things. Most of us are capable of doing this occasionally. We might be quite capable of

focusing on our work without sparing a thought for the homeless person on the street outside our office. But whether we are in this state transiently or permanently, there is no “thou” visible—at least, not a thou with different thoughts and feelings. Treating other people as if they were just objects is one of the worst things you can do to another human being, to ignore their subjectivity, their thoughts and feelings.

When people are solely focused on the pursuit of their own interests, they have all the potential to be unempathic. At best in this state, they are in a world of their own and their behavior will have little negative impact on others. They might end up in this state of mind because of years of resentment and hurt (often the result of conflict) or, as we see, for more enduring, neurological reasons. (Interestingly, in this state of single-minded pursuit of one’s own goals, one’s project might even have a positive focus: helping people, for example. But even if the person’s project is positive, worthy, and valuable, if it is single-minded, it is by definition unempathic.

So now we’ve made a specific move: aiming to explain how people can be cruel to each other not out of evil but because of empathy erosion. While that feels marginally more satisfying as an answer (it is at least the beginning of an explanation), it is still far from complete. Empathy erosion as an explanation begs the further questions of *what* empathy is and *how* it can be eroded. But at least these are tractable questions, and ones we shall attempt to answer as we proceed through this book.

By the end of our journey, there should be less of a nagging need for answers to the big question of understanding human cruelty. The mind should be quieted if the answers are beginning to feel satisfying. But before we delve into

the nature of empathy, let's look at a handful of factual examples from around the world to prove that the awful things the Nazis did were *not* unique to the Nazis. We have to go through this if only to eliminate one (in my opinion) absurd view, which is that the Nazis were in some way uniquely cruel. As you'll see, they weren't.

## **Empathy Erosion Around the Globe**

Erosion of empathy is a state of mind that can be found in any culture. In 2006 I was in Kenya with my family on holiday. We landed in Nairobi, a massive international city swirling with people. Sadly, Nairobi is home to one of the largest slums in Africa. People sleeping on the streets, mothers dying of AIDS, malnourished children begging or doing anything they can to survive. I met Esther, a young Kenyan woman, one of the fortunate ones who had a job. She warned me to be careful of the rising crime in Nairobi.

"I was in the supermarket," she said. "Suddenly, a woman near me who was queuing to pay for her groceries let out a scream. *A man behind her had cut off her finger.* In the commotion, the man slid the wedding ring off the severed finger and ran off into the crowds. It all happened so quickly."

This is a shocking example of what one person can do to another. Formulating the plan to go out into the crowded supermarket to steal is easy enough to comprehend, especially if a person is starving. Formulating the plan to take a knife along is a bit harder to identify with, since it indicates clear premeditation to cut something.

But for me the key is to imagine the mind of the person in the seconds just before the act of cutting. At that very moment presumably all that is visible to

the thief is the target (the ring), a small object that could feed him for weeks. All that is lying between him and his next meal is the woman's finger that has to be severed. The fact that the finger is attached to a hand is mere inconvenience, and cold logic points to the solution: Detach it. The fact that the hand is attached to a person, with her own life and her own feelings, is at that moment irrelevant. Out of mind. It is an example of turning another person into (no more than) an object. My argument is that when you treat someone as an object, your empathy has been turned off.

This example might suggest that someone capable of this crime had a momentary blip. Could the perpetrator's desperation, hunger, and poverty have been so overwhelming that he temporarily lost his empathy for the victim? We have all experienced, or observed in others, such transient states, where afterward one's empathy recovers. I'm guessing that during your transient lapses in empathy, nothing as awful happens as we saw in this example. This suggests that what this man did to this woman was *more* than a transient lapse. My concern in this book is with this more enduring phenomenon—the result of more stable traits where it is harder, if not impossible, to recover empathy and where the consequences can be extremely serious. We are going to take a close look at people in the population who desperately need empathy but who, for various reasons, don't have it—and probably never will.

But more of that later. For now, I am going to limit myself to four other examples of empathy erosion around the planet because we don't need lots of distressing examples to have proof that this can happen in any culture.

Josef Fritzl built a cellar in his home in Amstetten, in northern Austria. You probably heard about this case, since it made worldwide headline news. On August 24, 1984, he imprisoned his daughter Elisabeth down in the cellar and kept her there *for twenty-four years*, telling his wife she had gone missing. He raped Elisabeth—day after day—from age eleven until well into her young adulthood. She ended up having seven children in the basement prison; one died at three days old, and her father (the child's father and grandfather) burned the body to dispose of the evidence.

Repeatedly during those twenty-four years Josef and his wife, Rosemarie, appeared on Austrian television, apparently distressed by Elisabeth's disappearance, appealing to the public to help them trace her. Josef claimed that three of Elisabeth's children mysteriously turned up on his doorstep, abandoned by their mother, and he and his wife (their grandmother) were raising them. The other three children grew up in the basement prison, ending up with major psychological disturbance. How could a father treat his daughter as an object and deprive her and three of his children/grandchildren of their right to freedom in this way? Where was his empathy?

The next example of empathy erosion that stopped me in my tracks was a report on BBC's *Newsnight* program. On July 24, 2002, rebel soldiers entered the Ugandan village of Pajong. Esther Rechan, a young mother, recalls what happened next:<sup>7</sup>

*My 2 year old was sitting on the veranda. The rebels started kicking him. They kicked him to death. . . . I had my 5 year old with me, when the female rebel commander ordered all of us with children to pick them up and smash them against the veranda poles. We had to hit them until they were dead. All of us*

*with children, we had to kill them. If you did it slowly they would beat you and force you to hit your children harder, against the poles. In all, 7 children were killed by their mothers like that. My own child was only 5.v*

What was going through the minds of these rebel soldiers that they could force a mother to batter her own child to death?

Now consider an example from a lesser-known holocaust, one *not* committed by the Nazis. I heard about this when I went to Turkey last summer. The Turks are renowned for their warm, welcoming, friendly culture, but when they were under Ottoman rule, they regarded Armenians (a Christian sect) as second-class citizens. Indeed, as far back as the 1830s, Armenians were not even eligible to give testimony against Muslims in court—their evidence was considered inadmissible. By the 1870s Armenians were pressing for reforms, and during the 1890s at least 100,000 Armenians were killed. On April 24, 1915, 250 Armenian intellectuals were rounded up, imprisoned, and killed. On September 13 the Ottoman parliament passed a law decreeing the “expropriation and confiscation” of Armenian property, and Armenians were marched from Turkey to the Syrian town of Deir ez Zoor. En route and in twenty-five concentration camps (near Turkey’s modern borders with Iraq and Syria), *1.5 million Armenians* died. Some were killed in mass burning, others by injection of morphine, and yet others by toxic gas. It is a history that is not often told, and the genocide of the Armenians is clear proof (if any were needed) the Holocaust was not unique to the Nazis.

Here’s my last example of extreme human cruelty, this time from the Congo. Mirindi Euprazi was at home in her village of Ninja in the Walungu region of the

Democratic Republic of Congo in 1994 when the rebels attacked. She told her story: “*They forced my son to have sex with me, and when he’d finished they killed him. Then they raped me in front of my husband and then they killed him too. Then they took away my three daughters*”.

She hasn’t heard of the three girls since. She describes being left naked while her house burned. I imagine—like me—you are astonished beyond words by this event. How do rebel soldiers lose sight of the fact that this person was a woman, no different from their own mothers? How can they treat her as an object in this way? How do they ignore that this boy—forced to have sex with his mother—is just a teenager, with normal feelings?

But that’s more than enough examples of human cruelty from different cultures to remind us of what humans are capable. If I’m right that such acts are the result of no empathy, then what we need urgently are answers to two basic questions: But that’s more than enough examples of human cruelty from different cultures to remind us of what humans are capable. If I’m right that such acts are the result of no empathy, then what we need urgently are answers to two basic questions: What is empathy? And why do some people have less than others?

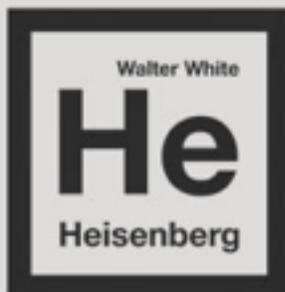
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# Q

Pre-learn and understand the following terms:

- objectify
- subjectivity
- empathy
- tractable
- transient state
- subhuman

1. What is the *paradox* of human nature?
2. Why is it ironic for the human science to describe objects of study as “subjects”?
3. Why is the *concept of evil* “no explanation” or “wholly inadequate” to scientists?
4. What does “empathy erosion” mean?
5. How did Macbeth (the character) shift from an *Ich-Du* personality to an *Ich-Es* personality?
6. What does “ignore subjectivity” mean?



Last updated Tuesday, Jul. 17 2012, 3:03 PM EDT

# How *Breaking Bad*'s Walter White redefines modern evil

by Lynn Crosbie

SPECIAL TO THE GLOBE AND MAIL

In Hell, as conceived by John Milton, Lucifer's pernicious deeds are never seen. Indeed, they are barely heard, as the rebel angel tends to squish into toads' and serpents' bodies to whisper maledictions and very bad ideas.

Yet he always sounds sweet, and seductive; he is a heavenly being, after all.

"Walt – was that you?"

On last season's finale of *Breaking Bad*, Walter White, himself having morphed beyond recognition since he first appeared in season one, called his wife after coolly liquefying an enemy of epic proportions.

Yet he seemed collected.

His wife: not so much. "Was that you?" she asks, as she watches news footage of the face-melting explosion that killed drug overlord Gustavo Fring.

And she is seen, via flashback, asking the same question in the hotly anticipated premiere of season five, the show's last, which aired on Sunday night.

"What happened?" she then quakes. White's answer, "I won," was steady and low, and as deadly as he had become.

Last week, during an interview, actor Bryan Cranston said there would be "silverback gorilla chest-thumping" on his character's part; Aaron Paul, who plays Jesse, spoke of the "darkness" that will characterize this season.

Both appeared in Sunday's episode, which aired on AMC with a gimmicky "Story Sync," where one could pull up the show's website, answer trivia and be polled.

This proved an exercise in absurdity: Fans of the monumental drama are loath to be distracted. One question, however, stood out: “If you were Skyler, would you be scared of Walter?”

“Hell, yes” was the affirmative option and Hell is where this show – in its vast intelligence a far greater puzzle than *Lost* – has landed: into the “darkness visible” that Milton describes in *Paradise Lost*, reigned over by the best, most credible, Lucifer ever to have appeared in pop culture.

Milton’s Satan is a fallen archangel who wars with God and all of heaven; who is cast to the underworld he rules gladly, as his pride does not permit his subservience.

He travels to Earth and Heaven freely, for he is still a shape-shifting angel, but wherever he goes, he takes Hell with him. “Myself am Hell,” he deduces in one of his great tragic-heroic moments.

In the Walter White version, a busted-up, desperately ill science teacher and car-wash employee curses his boss and his boss’s feral eyebrows, and decides to fabricate crystal methamphetamine in order to provide for his family.

Ostensibly, this reasoning gives our natural-born psychopath a moral centre, however illusory.

He too travels freely through filth and beauty. When first confronted in the previous season by his wife, who foolishly fears for him, he tells her, cruelly, that he is not “in danger.”

“I am the danger,” he snarls.

Or he is Hell, depending on what lens you are using to examine this remarkable show, which is essentially, in this fifth year, a flawless, 39-hour film.

There are so many available comparisons in art.

The episode opened with White playing with his Denny’s breakfast. He was wearing a wig and a small bandage on his nose, killing time before receiving an M60 machine gun.

He made the number 52 with his bacon: the atomic number of tellurium, which is a silver-grey or gun-coloured metallic substance.

The machine gun was straight out of *Scarface*, which AMC advertised during the show; the bandage a synecdoche evoking the Invisible Man, a mad scientist visible only when dressed.

All this in one moment: Throughout the series one finds and discards artistic and pop likenesses of Walter White, including Jekyll and Hyde, Harvey “Two-Face” Dent or Cronenberg’s particularly acute Fly who represents addiction, violence and the nightmare hybridity that Walter White, AKA Heisenberg (his S.S.-derived pseudonym), embodies.

But ultimately, it is *The Godfather* that most closely resembles *Breaking Bad*, or vice versa.

In the final scene of the first film, Michael – who has eerily transformed for, he would assert, his family’s sake as well, from a clean-cut war hero to a cold-blooded mass murderer – is asked by his shaky wife if he ordered the deaths of the Five Families; of his own brother-in-law.

He is at first enraged by her temerity, then he mollifies her with a soft “no.” The movie ends with the door closing on her and her short-lived relief.

Skyler, who used to be a devious ball-breaker, is just a shell now. “I’m afraid of you,” she told Walter on the new episode. We watched, knowing he had poisoned a child to near-death last season, with the berries from lily of the valley flowers, in order to execute his plan against Fring.

And we watched Walter turning to his wife after discovering the man she cheated with is now a mere mutilated husk (his condition is called “an act of God” by the also-frightened, once-irrepressible Sol Goodman.) Conversely, an act of the superhuman Devil.

He holds her and we can feel her terror. “I forgive you,” he says, gently, and it is the most nauseating moment imaginable.

Ultimately, even Michael Corleone has nothing on White, whose arch-villainy, genius and pride isolate him as modernity’s most distinctive, quietly terrifying monster.

He is a hybridized form because such evil causes gross deformity, and because in an act of comic book-meets-ultraviolence, he, the brilliant chemist, lives in a state of perpetual mitosis.

He is a foolish-looking, mild-mannered, middle-aged man with cancer that is in remission as his true illness metastasizes inside of him and blooms like the Lily of the Valley he keeps, in a fey basket, on his patio.

## Q

Pre-learn and understand the following terms:

- temerity
- mollifies
- irrepressible
- perpetual mitosis

1. Why are Lucifers words barely heard?
2. What does "however illusory" mean? What is it referring to?
3. What is the symbolic value of the atomic number for tellurium?
4. Satan speaks, "Myself am Hell", Walter White speaks, "I am not in danger, I am the danger". What line or lines does Macbeth speak that mirror these ideas?
5. Who is Heisenberg? Research Werner Heisenberg (Walter White's alterego) and find out why he is a controversial figure.
6. How is Walter White, a scientist, like the Nazi Scientists mentioned in the *Science of Evil* excerpt?
7. How does Walter White objectify his family? Does Walter White begin to "ignore the subjectivity" of individuals? Does Macbeth? Explain.