

## CHAPTER 5

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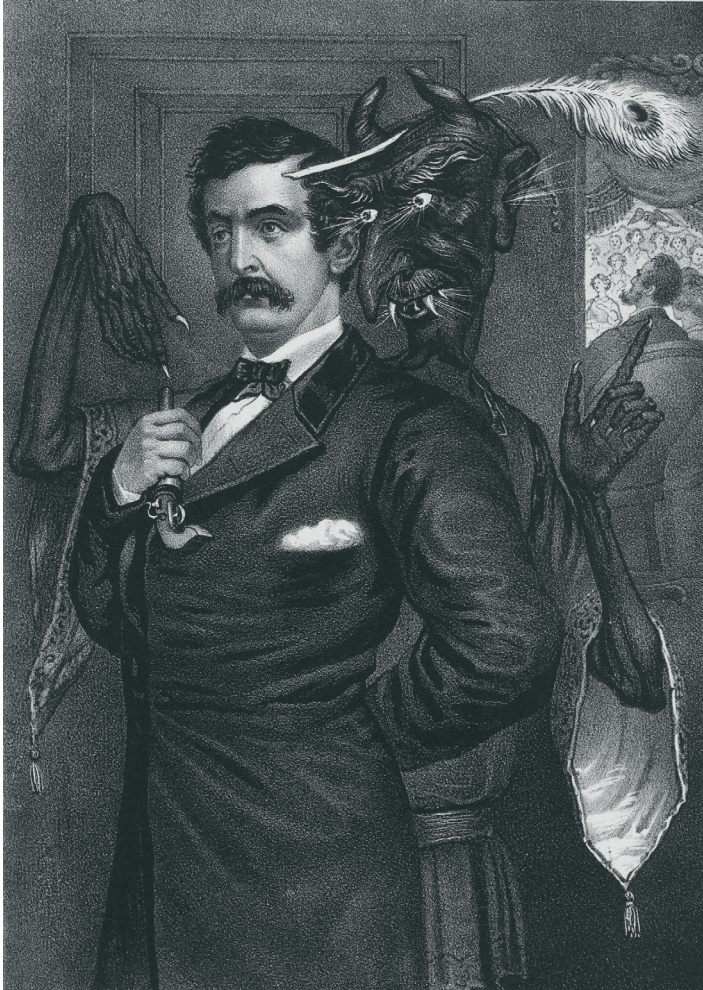
### “The Devil Made Me Do It”

#### *The Deification of Consciousness and the Demonization of the Unconscious*

John A. Bargh

Other chapters in this book on the social psychology of good and evil address important questions such as: What are the psychological processes that lead to positive, selfless, prosocial, and constructive behavior on the one hand or to negative, selfish, antisocial, and destructive behavior on the other? Such questions concern how the state of a person's mind and his or her current context or situation influences his or her actions upon the outside world. In this chapter, however, the causal direction is reversed. The focus is instead on how the outside world of human beings—with its religious, medical, cultural, philosophical, and scientific traditions, its millennia-old ideologies and historical forces—has placed a value on types of psychological processes. It is on how these historical forces, even today, slant the field of psychological science, through basically a background frame or mind set of implicit assumptions, to consider types of psychological processes themselves as being either good or evil (or at least problematic and producing negative outcomes).

There exists a long historical tendency to consider one type of mental process to be the “good” one—our conscious and intentional, deliberate thought and behavior processes—and another type as the “bad” and even “evil” one—our automatic, impulsive, unintentional, and unconscious



**FIGURE 5.1.** Satan tempting John Wilkes Booth to the murder of President Abraham Lincoln (1865 lithograph by John L. Magee). From Library of Congress Prints and Photographs Division.

thought and behavioral processes. These valuations are part of a historical tradition dating back at least 2,000 years to early Christianity (as in “the spirit is willing but the flesh is weak”) in the writings of Saints Paul and Augustine, a legacy that continued into the Renaissance with Descartes’s explicit equating of the conscious mind with the God-like soul and the automatic or reflexive mind with base animal instincts; then to Freud’s literal demonization of the unconscious as a separate destructive mind inside

each of us, the source of self-destructive and maladaptive thoughts, emotions, and motivations; and to the psychological science (especially the subdomains of self-regulation, judgment, and decision making) of today.

To give a flavor of how this good-versus-evil characterization continues to play out today, here are a few examples. In their comprehensive review of self-regulation theory and research, Mischel, Cantor, and Feldman (1996) summarize the relation between conscious, intentional processes and automatic, unconscious ones as follows:

The encoding of the features of particular situations is often highly automatized (Bargh & Gollwitzer, 1994), making conscious control unnecessary and, even if desirable, difficult. These automatic construals may be *problematic* when they are linked with *maladaptive reflexive patterns* of affect and behavior, such as *uncontrolled impulsiveness*, that jeopardize the person's own long-term goals. For example, *aggressive adolescents* may readily encode ambiguous events . . . as personal violations to which they respond instantly with aggression. . . . *Physically abusive men* are prone to respond to perceived rejection with *uncontrollable anger and physical violence* . . . [and then there are] the automatic construals of *rejection-sensitive, abusive individuals or of depressed individuals*. . . (p. 335; emphasis added)

This passage is not taken out of context. It is the *only* mention of automatic or unconscious mental processes appearing in the chapter; it is exclusively (and vividly) negative; and no positive effects are ever mentioned, even though the one paper cited here (Bargh & Gollwitzer, 1994) concerned the automatic operation of positive achievement motivations. Nor is this an isolated example; mainstream self-regulation theorists have repeatedly dismissed the idea of unconsciously operating motivational and behavioral processes as “warmed-over behaviorism” (Ainslie, 2014; Mischel, 1997; see later discussion) or argued that effective self-regulation is exclusively conscious and intentional in nature (Bandura, 1986).

As a second example from a quite different research domain, the popular dual-process “System 1 and System 2” model (Kahneman, 2011) assigns very similar negative-versus-positive roles to automatic (unconscious) and deliberate (conscious) thought, respectively. In the opening paragraph (abstract) of Morewedge and Kahneman's (2010) presentation of the two systems, System 1 is described as fast, associative, and not controlled, whereas System 2 is slower and under executive control. This is followed by the summary: “System 1 makes the errors, System 2 corrects them” (p. 435). In its historical context, this simple statement can be seen as a continuation of the Freudian idea that the unconscious is the source of errors and suffering that can only be corrected by bringing the unconscious material into the light of consciousness (Higgins & Bargh, 1992).

Our tendency to equate our conscious mind with goodness and our

unconscious or “animal” mind with badness is driven by a very deep historical, religious, and cultural current, one that can be traced back at least 2,000 years. It is such a part of our fundamental Western ideology that it operates quite implicitly, as part of our unexperienced but important background, as water is to a fish or greed to a banker (no joke: see Cohn, Fehr, & Maréchal, 2015). This is an important point because my goal here is to call attention to this tendency and thus, hopefully, decrease it. Cultural ideologies can be remarkably long-lasting and persistent, carrying over from one generation to the next, operating implicitly on our judgments and behavior even centuries after their original reason and context have ceased to exist (Uhlmann, Poehlman, & Bargh, 2008, 2009).

### THREE POWERFUL INFLUENCES

The deification of consciousness and the corresponding demonization of unconscious or automatic processes are overdetermined; many powerful forces contribute to our favoritism toward one over the other—historical, religious, cultural, motivational, and ideological.

#### The Unconscious as Historical Scapegoat

“The spirit is willing but the flesh is weak.” Aggressive or self-indulgent, destructive animal impulses have long been said to come from the physical, animal body and could be prevented or corrected only by application of the spirit, or conscious mind, riding in like a white knight to the rescue. According to Hannah Arendt’s (1978) historical analysis of the concept of free will, this idea can be traced back at least 2,000 years, to St. Paul (letters to the Corinthians and to the Romans). It is repeated 1,600 years later by Descartes (1641/1931) in his division of the mind into metaphysical and physical aspects. It is repeated again in Freud’s assignment of destructive and self-defeating impulses and motivations to the primary process of the unconscious, which can be overcome and cured only by bringing them into the light of consciousness. And it is repeated today in canonical models of (exclusively conscious) self-regulation abilities and of judgment and decision making.

#### *Saint Paul and Saint Augustine*

Hannah Arendt, in the first chapter of her *The Life of the Mind* (1978), distinguishes between political and psychological conceptions of free will. The ancient Greek philosophers were concerned with the political concept only, with the ability to choose between courses of action without external coercion. The political concept of free will assumes that otherwise the

person is free to choose—that is, that there are no *internal* determinants of the choice other than consciously aware and intentional choice processes. Thus the political concept of free will (freedom from external coercion or causation) assumes the existence of psychological free will (freedom from internal, nonconscious causation); thus, according to Arendt, the issue of purely psychological free will never arose for the ancient Greek philosophers.

It did become an issue for the early Christian theologians many centuries later. The issue of *psychological* free will developed into a real problem for the early Christian church, given its twin axioms that God was all good and also all powerful. As evil was recognized to exist in the world—people did bad things such as theft, murder, and rape, and there were also evil natural catastrophes such as floods and volcanic eruptions (see Neiman, 2002)—how then could evil exist if God were all powerful (and all good)? The influential Manichean heresy during the early years of the Christian church solved this problem by asserting that good and evil were separate forces and thus that God was all good but not all powerful.

Augustine, in fact, was originally a Manichean whose influential theological writings solved the problem through the argument that while God was indeed both all good and all powerful, He had to permit the existence of evil in order for there to be a fair and just basis for the Final Judgment on each of our souls. That is, humans must be given the ability to freely choose and do evil, so that they and they alone would be responsible for it and be fairly judged on their actions after death. Our free will was thus another way in which, as early Christian theology held, humans were created in God's image; just as God was the original, uncaused cause and source of the universe and creation, so too were we the original (uncaused) source of our actions. Arendt concludes that hence the concept of free will was originally a religious concept. With the rise and political domination of the Christian church over Europe and then Western civilization for the next 1,500 years, the doctrine of human free will as an original uncaused cause of our actions became legal, ideological, and cultural dogma as well (see Arendt, 1978; Neiman, 2002).

And a thousand years later, with Descartes, it became philosophical doctrine as well.

### *Descartes and the Renaissance*

Following Christianity's theological position that humans were created in God's image, Descartes (1641/1931) equated the conscious mind with the metaphysical soul, for which he gave a physical location, the pineal gland. This was the key transition from the supernatural, metaphysical soul to its physical, natural instantiation as the conscious mind. Descartes took the supernatural soul and located it in our physical body. But at the same time



he made a sharp division of the conscious mind from the rest of the (animal) body, thus preserving the supernatural aspect of the soul (as embodied in the conscious mind) as separate and distinct. Conscious, aware thought was distinguished from animal, automatic mental processes (which Descartes explicitly acknowledged). This was a turning point in the philosophy of mind, the first dual-process model: a good, causal conscious mind (soul) that must control the individual's base animal impulses and reflexes.

Descartes's division of the mind into the conscious and the physical identified the conscious mind (or, today, "System 2") with the soul, and it was our God-like component. He acknowledged a "System 1" component to the mind as well; the automatic, fast, emotional workings of the mind were identified not with our soul but with the physical world, the one we shared with animals. Our conscious mind was our *superpower*—in comparison to the other animals, it made us God-like and superior. Descartes's division of the conscious mind from the animal unconscious was more than a mind-body dualism; it also incorporated the division between heaven and earth themselves: Unique among terrestrial animals, humans had a foot in both worlds.

### *"The Devil Made Me Do It"*

Despite Augustine's arguments against the Manichean heresy, the belief in separate good and evil forces in the universe persisted in common thought. As God was all good, and we were God's children, evil was generally attributed to external supernatural forces and not to human nature. For example, shortly after John Wilkes Booth's assassination of President Lincoln, a lithograph appeared in newspapers—and was endorsed by an Act of Congress—depicting the devil tempting Booth to perform the evil act (see Figure 5.1). In the illustration, the devil isn't forcing Booth to do anything, but is rather persuading him; thus the devil is depicted here as the source of the evil thoughts and decisions that Booth himself ultimately makes (of his own free will). In this way, the cause of the assassination is portrayed as an evil force acting upon Booth's normal thoughts and choices, changing them into something not human (i.e., evil). (The cultural legacy of this belief is still with us. The popular 20th-century American comedian Flip Wilson (1970) became famous for his "the devil made me do it" routine: his character Geraldine's standard excuse for anything wild and crazy she impulsively did, such as buy an expensive dress she couldn't afford.)

In the Middle Ages, disturbed or counternormative (strange) behavior was attributed to demonic possession. Because the abnormal behavior could not be considered to be from our good, God-like human nature itself, it must be caused by supernatural evil forces, an evil demon who had possessed the individual and caused the abnormal behavior. The prevalence of this attribution of odd, abnormal, or psychotic behavior to supernatural

forces was commonplace as recently as 1890, still prevalent in Western culture—including among medical doctors (see Crabtree, 1993)—about the time that Freud began his research and treatment of clinical patients.

However, in the late 19th century, recourse to supernatural forces was increasingly becoming anathema to the emerging medical scientific understanding and treatment of mental disorders, which acknowledged only physical, not metaphysical, causes. Freud took these external, supernatural demons and moved them into the patient's physical body itself—as a “second mind” replete with self-destructive and maladaptive impulses and motivations. Just as Descartes put the good soul in a physical location in the human body, 250 years later Freud put the evil demons inside the human body. *Descartes put the supernatural good soul in our conscious mind, and Freud put the supernatural evil demon in our unconscious mind.* Thus did Freud quite literally demonize the unconscious workings of the human mind.

### *Freud and the Demonization of the Unconscious*

Freud himself credited the discovery of the unconscious mind to Anton Mesmer and the early hypnotists (see Brill, 1938). According to Adam Crabtree's (1993) detailed and comprehensive account, Mesmer did not consider himself a hypnotist and was in fact not in favor of psychological interpretations of his “animal magnetism” treatment of physical ailments, problems that the medical science of the time could not cure. He took on these lost causes and tried to alleviate the patients' suffering and symptoms through what we recognize today as a very Eastern notion of bodily energy fields (*ka*), which he believed could be effectively manipulated through his treatment techniques. Mesmer did not believe he was treating mental illnesses, but rather was treating physical illnesses through manipulations of these presumed physical energy fields.

Still, these manipulations, involving hand waving and movements around the patient's body, did have some success—not great or highly reliable success, but still better than the mainstream medical treatments of the time, which had given up on these cases entirely. And as it turned out, over many decades of refinement and some research on these techniques—some of which were adjudicated by Benjamin Franklin, among others—the successes, such as they were, were not found to be due to manipulations of any actual energy fields but instead to their psychological effects on the patients. Mesmer himself did not know (and did not live to find out) that these were, largely, mental illnesses he was treating, and he personally strongly resisted the notion that his techniques worked on the patients' psychology instead of their physical body processes. Nonetheless, these techniques became the forerunner of the hypnotic therapies of the middle

1800s, which for the first time revealed physical illnesses that had an exclusively psychological or emotional cause and that could be somewhat effectively treated by hypnosis and the other emerging psychotherapeutic techniques (see Crabtree, 1993).

Janet and Freud arrived rather late in this transitional period, in which hysterically and psychopathologically caused physical symptoms were eventually, over a span of 125 years, discovered to have psychological origins and to be treated through hypnosis and other emerging psychotherapies (such as the eventual “talking cure”). Thus Freud was not the historical *origin* of the psychotherapeutic treatment of these illnesses but actually the culmination of over a century of slow development of the psychotherapeutic idea, traced in detail in Crabtree’s (1993) account. As a good medical doctor at the dawn of the 20th century, Freud eschewed the location of these illnesses in supernatural forces such as demonic possession. Moved, as were so many others at that time, by the *Zeitgeist* of Darwin and the goal of providing natural, scientific explanations for phenomena (such as the creation of life) that had long been explained through recourse to religious or supernatural causal forces, Freud instead located these psychopathologies in the workings of the patient’s physical body itself.

But if the causes of maladaptive and odd behavior were no longer supernatural evil demons possessing the God-like body and soul of the human victim and now, instead, resided within the patient’s physical body, they still could not be attributed to the person’s God-like conscious mind. And so Freud took the external demons of possession and placed them in physical form within the patient’s body, as a “second mind” that existed separately and in secret from the conscious mind. This was, historically and literally, *the demonization of the unconscious*. Thus the human unconscious—unintended influences of which the person was not aware—became the new, and medical, scientific home for the demons of the Middle Ages, the modern “I didn’t mean to” scapegoat for bad behavior and negative outcomes.

In *Psychopathology of Everyday Life* (1901/1914), Freud discusses a wide variety of mundane errors, a collection of slips of the tongue, forgetfulness, and other mistakes taken from real life, many starring Freud himself. Each of these numerous examples is explained through recourse to some kind of unconscious process (i.e., something else going on in the person’s life: a problem, strong desire, or reminder of a past traumatic event); in one, for example, Freud leaves his favorite cigar store without paying for the cigars, which he describes as “a most harmless omission” caused by his focus that day on budgetary matters (p. 97).

It is unfortunate that Freud did not limit his “second mind” account to the cases of mental illness and psychopathology he treated. Instead, he generalized from these pathological individuals to the view that *all* of us had this error-prone “second mind” inside us, operating in secret from the



conscious mind. Tellingly, Pierre Janet, who saw the same types of patients and dealt with the same psychopathologies, disagreed with Freud on this point; Janet believed instead that the maladaptive and self-destructive “second mind” was an abnormal and relatively rare condition (Crabtree, 1993) and not a characteristic of normal human functioning. But as we know, it was Freud’s position that prevailed in psychiatry and so greatly influenced popular culture.

### Still Fighting the Cognitive Revolution

Freud’s model of the “secret second mind” also influenced modern-day cognitive science, which persists in defining unconscious processes as those which operate entirely outside of conscious awareness—including awareness of the triggering external stimulus event itself. By operationalizing unconscious processes in this manner—which is not the way they have been defined historically by Darwin, Freud, Dawkins, and others—the domain of unconscious influences is dramatically restricted to that which the human mind can do with subliminal stimuli. Intentionally or not, this delimitation of the role of unconscious influences in the higher mental processes to include only those that can occur with subliminal stimulus presentation is in the service of championing the causal role of conscious processes. By the “subliminal” definition of the unconscious, all of the mental processes that operate—even unintentionally—when the person is aware of the stimulus itself are considered conscious processes. Because these are by far most mental processes, the subliminal definition of unconscious processes effectively defines the unconscious out of existence. We return to this definitional issue later, but we first consider its roots, not only in Freud’s “second mind” but also in the heat of the battles of the cognitive revolution against behaviorism.

The cognitive revolution (Chomsky, 1959; Neisser, 1967) marked a return to the study of conscious thought, memory, and the higher mental processes. It was a rejection of the behaviorist approach, which sought to explain even the higher mental processes of human language and social behavior as stimulus–response (S–R) chains. Skinner (1957) pushed the S–R principle as far as he could, in an attempt to account for the higher mental processes in humans such as language and social interaction behavior, and failed utterly (Chomsky, 1959; Koestler, 1967). This failure more than anything else opened the door to cognitive psychology, which was founded on the completely opposite set of basic assumptions. Now, everything except for primitive sensory and perceptual processes (such as figural synthesis and pattern recognition) was assumed at the outset of cognitive psychology to be under conscious and intentional “executive control.” Thus in the remarkably short span of 10 years between the 1957 publication of Skinner’s *Verbal Behavior* and the 1967 publication of Ulric Neisser’s *Cognitive*

*Psychology*, the field of psychology (especially in North America) underwent a seismic paradigm shift, from the presumption of complete external stimulus control over the higher mental processes to the presumption of a complete *absence* of any external stimulus control. (In an irony of psychology's history, Neisser wrote *Cognitive Psychology* while at Harvard, in a small basement office in William James Hall, under the very nose of Skinner. They often found themselves on the elevator together, but according to Neisser [personal communication, 2003], never spoke.)

Thus the founding axiom and ideology of the cognitive paradigm in psychology was that conscious, intentional mental processes were the exclusive cause of the higher mental processes such as judgment and social behavior. It was directly opposed to the behaviorist assumption that external environmental events were the exclusive cause. But today, 50 years later, the cognitive revolution is still being fought by some. They view with suspicion any model that posits a positive role for unconscious processes in judgment or self-regulatory behavior and explicitly label it a "return to behaviorism" or "warmed-over behaviorism" and wonder aloud why we ever fought the cognitive revolution in the first place (Mischel 1997; Ainslie, 2014; see also Bandura, 1986). Though pains have been taken to point out how the modern research on the unconscious operation of internal cognitive and motivational processes is actually antithetical to behaviorism, because in the modern models the external stimulus by itself determines nothing and internal cognitive and motivational processes are always the proximal causes (see Bargh & Ferguson, 2000; Wood & Ruenger, 2016), there nonetheless remains today an almost visceral rejection by influential psychological scientists of an unconscious role in the higher mental processes.

If unconscious processes are viewed as a return to behaviorism, then one tactical way to continue to fight the cognitive revolution against it would be to "define away" unconscious processes, as cognitive psychology has done for many years now, by operationally defining them as "what the mind can do with subliminal stimuli." In 1992, a special issue of the *American Psychologist* with articles by an expert panel of cognitive psychologists reached the overall conclusion that the unconscious was rather dumb (Loftus & Klinger, 1992). Why? Because it could not do very much complex processing with such low intensity or briefly presented (i.e., subliminal) stimuli. (As Tim Wilson pointed out at the time [personal communication, 1992], the unconscious processes were still smarter than the conscious processes, which didn't even know a stimulus had been presented in the first place.)

The contemporary cognitive psychology definition of unconscious processes in terms of lack of awareness even of the causal stimulus events themselves is not the one that was used by scientists and scholars prior to the cognitive revolution, nor is it used this way in common language.

The historical definition of an unconscious process did not focus on the awareness (of the stimulus itself) dimension but on its *unintentional* nature. Unconsciously produced behaviors, as through posthypnotic suggestion, are those the person does not intend and the cause of which the person is not aware of. This is how the early hypnotists used the term (see Brill, 1938; Crabtree, 1993), how Darwin (1859) used it in *Origin of Species* (referring to how the farmers and herders of his time unconsciously used the principle of natural selection in their trades), how Freud consistently used it (Brill, 1938), and how Dawkins (1976, 1986) and evolutionary biologists use it today (see Bargh & Morsella, 2008).

When one considers the evolution of the human mind, which operated unconsciously for eons in an adaptive and functional manner prior to the late development of consciousness (Deacon, 1997), defining unconscious processes as those that operate on subliminally presented stimuli makes little sense. Unconscious causation of often quite sophisticated and adaptive behavioral tendencies is by far the rule in the animal kingdom (Dawkins, 1976). Contemporary evolutionary psychology has extended this principle to human beings, demonstrating and delineating the innate tendencies, motivations, and needs that humans are born with or which develop quite quickly after birth through epigenetic mechanisms responsive to the individual's early environment (e.g., Bargh & Huang, 2014; Kenrick & Giskevicius, 2013; Neuberg & Schaller, 2014)—all of which evolved to operate on normal, not (weak, brief, low intensity) subliminal strength stimuli. To draw the conclusion, based on studies of subliminal stimulus presentation, that the unconscious was rather dumb is like taking a dolphin out of the water, testing its abilities on dry land, and concluding dolphins are not very smart after all.

As might be expected, defining unconscious processes in terms of subliminal information processing has led to the conclusion by some in the fields of cognitive psychology and judgment and decision making that only conscious mental processes can produce the higher mental processes. Methodological criticisms of studies that conclude a role for unconscious influences in the higher mental processes hold them to a different standard than those for conscious processes: An unconscious process must satisfy *all* of the “four horsemen” defining features, but a conscious process need satisfy only one (as pointed out by Dijksterhuis & Aarts, 2010; Hassin, 2013). This leads to an overestimation of the causal role of conscious processes and an underestimation of the role of unconscious influences.

Ironically, defining away one type of process in favor of the other is to make the same type of mistake—but in the opposite direction—that the behaviorists made a century ago. Back then, the hard-nosed experimental psychologists of the time concluded that *conscious* processes were not causal, because there were (at that time) no reliable methods, in their opinion, to measure them (Watson, 1913). The behaviorists derided the

study of consciousness and conscious processes as unscientific. And as Arthur Koestler argued so eloquently in *The Ghost in the Machine* (1967), this dogmatic and rigid position of experimental psychology against conscious causation of the higher mental processes then proceeded to dominate American psychology for the next 50 years and prevented advances in psychological science at the same time that the other sciences were making huge strides in discoveries and advancement of knowledge. We would do well to avoid making this same mistake again.

### **It's What We *Want* to Believe**

Finally, the tendency to demonize our automatic and unconscious mental processes goes hand in glove with our basic self-serving motivation to believe that our own conscious and intentional decisions and behaviors are good. Anything selfish or hurtful to others can be attributed to these “not-conscious” influences instead, and this permits us to maintain our belief in the basic goodness of conscious mental processes. After all, consciousness is our very own superpower among the animals of the earth, and we cherish it, we want to think of ourselves as more than “just” an animal. This powerful desire to possess superpowers is easily seen in our tastes and preferences in escapist entertainment—the most common plotlines and characters in the most popular television shows and movies (*Superman*, *Harry Potter*, etc.) are about people with special abilities and superpowers. We yearn and long to have such superpowers so much that we are hardly likely to give up valuing and thinking very positively about the one we actually *do* have over other animals—our conscious mental processes.

This general motivated-cognition human tendency—to attribute good outcomes to conscious intentional processes and to place blame for any bad outcomes elsewhere—was noted very early in attribution research, in the self-serving tendency to make dispositional causal attributions (take credit) for successes and positive outcomes but situational attributions (place blame elsewhere) for failures and negative outcomes (Bradley, 1978).

These self-serving attributions, or rationalizations, are the product of conscious processes in service of the goal of reaching a positive, self-serving conclusion regarding the behavior and its outcome. As we will see, these conscious rationalizations can facilitate continued negative and even evil behavior by justifying it in some abstract, positive way, as in “the ends justify the means.” In fact, some have recently argued that the evolved purpose of consciousness itself was to be able to argue, to act as one’s own defense attorney, in order to maintain good standing in one’s social group (Mercier & Sperber, 2010). In order to remain in good standing in the group, and avoid its retribution when one produces bad or unwanted outcomes, it was important to be able to effectively deny personal responsibility and to produce a plausible, positively intentioned version of one’s actions.

Just how facile the conscious mind is at generating this ongoing positive narrative of one's actions was shown 30 years ago by the pioneering neuroscientist Michael Gazzaniga. He argued in *The Social Brain* (1985) that impulses to action arise unconsciously in the right brain hemisphere and are "interpreted" in an ongoing narrative fashion by the left hemisphere. This conscious interpretation of what one is doing and why is thus not a direct readout of the actual reasons but an after-the-fact inference or interpretation of what they must be (see also Wegner & Wheatley, 1999), and it functions to build a plausible (and positive) story. Gazzaniga recounts some of his early research involving posthypnotic suggestion; for example, telling his patients while they are in the hypnotic trance that at the count of 3, he will snap his fingers and they will get down on the floor on all fours, or that they will get up and leave the room: 3, 2, 1, *snap!* and they are on the floor or out the door. But immediately the patient is explaining this bizarre behavior in some plausible positive manner: "I think I lost an earring down here" or "I need to get a drink of water." It was striking how quickly the patient generated a good reason for what was actually a strange or rude thing to do—walking around on the floor on hands and knees in front of your doctor or abruptly leaving the room while he is sitting there talking to you. These plausible and self-serving positive spins of our actions—often inaccurate as to the actual reasons for them—are then incorporated into the ongoing narrative account of our lives (for empirical demonstrations of this effect, see Bar-Anan, Wilson, & Hassin, 2010). And so each of us continuously builds our life story, one populated almost exclusively by positive versions of our conscious intentions and actions.

### **UNCONSCIOUS PROCESSES ARE USUALLY GOOD, CONSCIOUS PROCESSES ARE OFTEN BAD (SOMETIMES VERY BAD)**

In case there is any doubt, here are some counterexamples to the over-determined tendency to value conscious processes as "good" and devalue unconscious ones as "bad." These are offered merely as reminders that conscious and unconscious cognitive processes do not in reality sort themselves neatly into "good" and "bad" boxes, respectively; it is not intended to be an exhaustive list.

#### **Good (Beneficial) Unconscious Processes**

Natural selection has shaped human beings (and other social animals) to be able to get along with others in social groups, to cooperate with and to help each other, to instinctively respond to the needs of infants and young children, to contagiously "catch" and thus empathize with the emotions

of whomever we are with (Sober & Wilson, 1998). What a bleak and misleading view of human nature it is to consistently portray our evolved and unconsciously operating impulses as mostly negative and selfish, as well as frequently self-destructive. It is certainly true that in extreme pathological cases such as addictions, or for those in dire need of an anger management class, these impulses can be self-destructive and a danger to others as well. But the generalization of those cases to a general model of how the mind works—that self-regulation consists of the conscious control through willpower of exclusively negative automatic impulses, or that automatic processes make the errors and conscious processes correct those errors—is to make the same mistake that Freud made when he generalized from his mentally ill patients to normal human functioning.

To relentlessly paint a picture in which our automatic impulses are negative or harmful (to ourselves or to others) misses the point that we would not be able to function at all without them. Over a half century ago, Miller, Galanter, and Pribram (1960) called our attention to the fact that without fast and automatically operating muscular coordination processes, we would not even be able to get out of bed in the morning. The hard-won skills of coordinating our numerous muscle movements, gained through often painful experience over the years of infancy and early childhood, become automated through skill acquisition processes so that eventually they require little if any conscious attention. Any complex skill—walking, driving, reading—has considerable unconscious components in order to free limited conscious processing capacity that would otherwise be overwhelmed. Remember back when you started to read or to drive a car—you probably don't remember how many months it took you to learn to stand up, and then many more months to be able to walk—and how effortless those experiences are now. As adults we take these hard-won skills for granted, but just because the details of their operation are no longer part of our conscious awareness does not mean all that greatly beneficial and absolutely essential work is not taking place behind the scenes.

Now let's take habits, described by some exclusively in terms of "evil" impulses to overeat or overdrink, to assume the worst about others, to react to insults with violence, and so on. We do need effortful, conscious self-regulation skills to overcome them. But research has more recently shown that the best and most reliable method of self-regulation turns out to be the development of *positive* habits that are triggered automatically and unconsciously by external situational cues. The extensive research program of Wendy Wood and colleagues (see Wood & Ruenger, 2016) has shown that the best way to actually perform desired behaviors—healthy, prosocial habits to exercise, to eat right, to take time out for one's kids, to get one's work or studying done first before relaxing and doing something more enjoyable, and so on—is to develop them as habits and then to rely on regular situational cues to activate the desired behavior.

For example, one study showed that nearly 90% of effective



self-regulators in the domain of exercise, those who did exercise on a regular basis, relied on a dependable location or time cue to trigger the desired behavior (see Wood & Ruenger, 2016). What the environmental cue most helpfully does is to activate the goal-directed behavior it has become habitually associated with, even when the conscious mind is—as it often is—occupied elsewhere. So when you arrive home from work still mentally rehashing the day at the office, so that you are distracted from the conscious intention of exercising, you still find yourself upstairs in your bedroom changing out of your “work clothes” (as you always do) and putting on your T-shirt, shorts, and running shoes. Or routinely stopping by your children’s bedrooms to say goodnight or check on them before retiring yourself. Wood and Ruenger (2016) summarized the benefits of habitual self-regulation as follows:

The research we reviewed highlights a number of advantages to acting habitually. For example, habit knowledge is protected from short-term whims and occasional happenings, given that habits form through incremental experience and do not shift readily with changes in people’s goals and plans. Also, by outsourcing action control to environmental cues, people have a ready response when distraction, time pressure, lowered willpower, and stress reduce the capacity to deliberate about action and tailor responses to current environments. Furthermore, habit systems are smart in the sense that they enable people to efficiently capitalize on environmental regularities.

The point is that habits—automatic impulses to act in a goal-directed manner that do not rely on conscious intentions to produce the actions—can be good as well as bad. It is not that fast automatic processes are bad and slow deliberate ones are good; what is really the determinant of whether a person behaves in a good or evil way are the goals and motives activated by those impulses. Having power over other people can automatically trigger selfishness and exploitation of those others in some people but greater concern and caring about them in other people, depending on one’s chronic interpersonal goals (Chen, Lee-Chai, & Bargh, 2001). The goal to exercise or to take time out for one’s family can be just as habitual as the goal to drink or eat or take drugs. It is not habit per se that is bad (or good), but the person’s goals or desires that have become habitual.

Well, you might say, these nice habits are all well and good, but how does one overcome the bad ones and develop the good ones in the first place? If the bad ones are already there, then they will rule the person’s behavior and be difficult to overcome. Yes, they will be, especially if one relies only on the vagaries and unreliability of conscious means to overcome them. Once again, it turns out, the most effective way to do difficult intentional things, those that you really want to do but are having trouble getting done, is by using automatic, unconscious means of enacting those desired behaviors.

Gollwitzer and colleagues' (Gollwitzer, 1999; Brandstatter, Lengfelder, & Gollwitzer, 2001) extensive work on *implementation intentions* is the short-term version of the same principle—reliable behavior control through environmental cuing—that underlies the effective habitual self-regulation processes reviewed by Wood and Ruenger (2016). Relying on slow and unreliable conscious choice processes to get the difficult behavior accomplished often fails because the person forgets to carry out the intention when the golden opportunity arises or because of consciously generated excuses or rationalizations as to why the hard thing doesn't need to be done right now ("I'll do it tomorrow"; "one more donut won't matter"). Implementation intentions, on the other hand, specify in advance the place, time, and method of how one will enact the desired behavior in concrete terms, so that when the specified future event occurs, the situation unconsciously cues the intended action.

In one early implementation intention study (Gollwitzer, 1999), some male college students reported having the goal, while home on Christmas vacation, to tell their fathers they loved them; this was something they were having trouble doing despite really wanting to. Those who made a concrete implementation intention on how to do this—"when I get into the car at the train station when he picks me up, I will tell him I love him"—were markedly more likely to successively carry out their intention than others who also wanted to do this but did not first form an implementation intention.

The principle of delegating control of difficult but desired intentions to the environment (instead of conscious choice at that time) has significant health benefits as well; Sheeran and Orbell (1999) found that, over a 6-month period, elderly patients were much more likely to remember to take their several important medications if they had formed implementation intentions about them than if they had not. Other studies showed marked increases produced by implementation intentions in getting screened for various forms of cancer, something we often avoid consciously thinking about and doing. And implementation intentions are especially helpful for people who have difficulty in conscious, willpower-based self-regulation, such as recovering drug addicts and schizophrenics (Brandstatter et al., 2001). Thus the delegation of a desired but difficult behavior to a reliable future situation would seem the best way to break an existing bad habit ("I'll have a piece of fruit for dessert after dinner tonight; I'll go get some out of the fridge right after I put my dinner plate in the sink") and get a good new habit started.

There are other evolved and "fast-automatic" positive behavior triggers beyond the self-regulation domain. For example, unconsciously produced imitation and mimicry tendencies produce greater bonding and liking of one's interaction partner and also greater empathy toward him or her (e.g., Chartrand & Bargh, 1999; Chartrand & Lakin, 2013). In mundane, normal, 24/7 mental functioning, our innate impulses to act and behave

are often quite positive; they cause us to smile at the baby, to run into the ocean to save someone from drowning, to cooperate instead of compete as our first option (e.g., Peysakhovich, Nowak, & Rand, 2014). For people with communal goals who characteristically put others' interests before their own, prosocial and selfless acts are the natural and spontaneous reactions to having authority or power over those others' outcomes (Chen et al., 2001). Again, these are just some examples; the larger point is that human beings evolved to be on good terms with each other, to cooperate and coordinate with them, as well as to effectively pursue our important needs and goals. Our evolved unconscious machinery, which is along with our habits the main source of automatic impulses to action, was never in the business of producing maladaptive outcomes (which would never have been selected for). It is mainly geared toward producing prosocial and personally beneficial (via goal pursuit) ends.

### **Evil (-Producing) Conscious Processes**

Just this morning came the news of the Charleston, South Carolina, church massacre. A young white man came into the church during a Bible study session and sat there for over an hour before walking up to and shooting each of his nine black victims, who had on his arrival invited him to come up and join their study group. His was not an impulsive or automatic violent outburst but a coldly premeditated mass murder. It is a sad and sobering reminder that many acts of pure evil are consciously intended, planned, and then deliberately carried out. Evil acts are hardly the exclusive domain of impulsive, unconscious influences.

In psychological science, conscious intentional processes are equated with executive processes that exert a top-down influence on responses to the world. This is the opposite causal direction to that championed by behaviorism, in which causation came exclusively from external environmental stimuli. Our executive processes give us the ability to overcome the influence of those stimuli, as in Mischel's (2014) famous marshmallow studies, transforming the meaning of those stimuli in order to better serve one's current goal (such as to delay gratification). Effective regulation of our emotional states as well often relies on internal cognitive transformation of the external reality into something less threatening or demoralizing (Gross, 1998), as when one engages in downward social comparison ("at least I'm not as bad off as poor Joe") or repeats to oneself "It's only a movie, it's only a movie" while watching a horror film.

The Charleston example illustrates that although executive processes carry out one's important goals, not all goals are good ones, and some are especially evil. Some might be good for the individual but bad for others and society in general. The top-down transformations of external reality by executive processes show that it is not external reality—the causal

stimuli of behaviorism—that drives these evil behaviors but the conscious and deliberate process that changes it. Thus these evil deeds are not due to unconscious impulses driven by external situations or stimuli (i.e., automatic processes, or System 1) but the internal conscious and deliberate transformations of that world in the service of the individual's goals and needs. Each of us, unfortunately, is quite adept at *rationalizing* our selfish deeds that harm or cost others, spinning their meaning to be not so bad after all or even as benefiting the others who are harmed (“We destroyed the village in order to save it”). These rationalizations are in the service of maintaining the positive illusion that we are good people and merit the esteem of others (Taylor, 1989).

These rationalizations or transformations of external reality that maintain our high opinion of ourselves are very conscious, very deliberate, and often very creative cognitive processes, and they have contributed significantly to some of the greatest evils in human history. In Roy Baumeister's (1996) analysis of the sources and causes of evil, the most powerful source he identified was clear threats to the unjustified but very high self-esteem of individuals and nations. For the sake of brevity, let's take Adolf Hitler as an example, as there is little debate that he was one of the most evil individuals and played a large role in some of the most savage and unspeakable evil behavior in recent human history. Hitler was the prime mover and shaker of many of the worst atrocities of the Second World War, and his aggressive territorial expansion policy was the proximal cause of the war itself. But in his youth he was out of work and homeless, a complete failure at becoming the great artist (or architect) he so strongly believed himself to be (e.g., Kershaw, 1998). Today, we much better understand the motivational reasons and processes through which Hitler identified himself so strongly with the German nation and greater, pan-German *Volk*, his absolute identification with the larger culture of which he was a part, in his apparent deep need to overcome and compensate for his own personal failures and lack of control over his own important outcomes (Kay, Gaucher, Napier, Callan, & Laurin, 2008). He so strongly identified himself with the historic, culturally and militarily renowned German nation that he became, in his own mind and in the image he relentlessly portrayed to its citizens, the human embodiment of Germany itself—he *was* Germany and Germany was him (Kershaw, 1998).

This transformation was certainly the product of conscious and deliberate executive processes. But more than that and far more destructive were the rationalizations of failure, the distortions and transformations of actual reality, that laid the blame elsewhere for first his artistic and then the nation's own failure, the defeat and surrender of the German army (in which he served for 4 years) at the end of the First World War. In his mind, the cause was not any shortcomings of the armed forces on the foreign front lines but a “stab in the back” by Jews and socialist politicians back

home. This defeat was so shocking and taken so personally by Hitler that he became hysterically blind for several weeks following the surrender in November 1918. He had tied his ego and identity to that of Germany and could not accept that the German army could have been defeated on the field.

The evils that Hitler propagated in the service of this twisted and distorted version of reality—with powers no longer limited to himself as a single individual but now as the dictator of a powerful totalitarian government and armed forces—were some of the greatest in human history. And on smaller scales they continue to occur today. The early accounts of the Charleston shooter paint a similar picture of an individual strongly identifying with a larger social group to which he belongs (whites) and hatred toward a less powerful social group, viewed as the enemy of his group and as deserving of retribution for imagined wrongs they had committed against his group. It is all too eerily reminiscent of Hitler's blaming of the Jews and Bolsheviks for his own and the German army's past failures. And the Charleston shooter carried out his evil in a systematic and quite deliberate fashion, as did Hitler. The main point, that evil is often the product of conscious, intentional, deliberate thought and deed, should not require any further elaboration here. The ability to consciously transform the realities of the world is a double-edged sword; when used to further the pursuit of one individual's or one group's goals at the cost of others' goals and even lives, it can facilitate evil-doing to an extent no unconscious or impulsive acts can.

## CONCLUSIONS

Extreme positions may be convenient, they may simplify our world, but they are usually wrong and get in the way of increased understanding. Regarding human higher mental processes and behavior, the Freudian theory of the causal primacy of the secret-second-mind unconscious, the behaviorist position of exclusive external stimulus causation, and the cognitive science position of exclusive conscious causation are all equally wrong. The higher mental processes in human beings are guided and influenced by both conscious and unconscious mental processes, one causing the other in dynamic and reciprocal fashion (Baumeister & Bargh, 2014).

Moreover, despite thousands of years of tradition to the contrary, neither type of process is inherently good or bad on its own merits. Both are to a large extent evolved adaptations of the mind, and so both tend more than not to afford us adaptive advantages. Conscious mental processes in particular have given us a tremendous advantage over all other animals, and, through their facilitation of our ability to communicate and cooperate with others, they are mainly responsible for the incredible achievements of

human civilization. But they are limited, and much necessary good work is also done by unconscious processes in the background (Baumeister & Masicampo, 2010; Nordgren, Bos, & Dijksterhuis, 2011).

It is encouraging, however, that recent reviews and theoretical treatments of the relative scope and abilities of conscious (aware, intentional) and unconscious (the operation and influence of which the person is not aware) mental processes no longer view them as oppositional, one against the other; instead, each is treated as adaptive and helpful in the human navigation of the modern world (e.g., Baumeister & Bargh, 2014; Baumeister & Masicampo, 2010; Dijksterhuis & Aarts, 2010). For example, implementation intentions are a combination of a consciously intended behavior and its delegation to a future event with high reliability of occurrence. Good habits, the most effective method of self-regulation, are a combination of conscious intention and willpower, with control over that desired behavior transferred over time to reliable environmental cues. Thus the most reliable path to good outcomes in our most important life domains is the combination of conscious and unconscious means to those ends.

As many have argued recently, progress in our understanding of the relative roles played by conscious (intentional, awareness of cause) and unconscious (unintentional, no awareness of cause) processes in the human higher mental processes will be made when we finally push beyond the traditional “one versus the other” conceptions (Bargh, 1994; Inzlicht, Barthelow, & Hirsh, 2015; Keren & Schul, 2009; Suhler & Churchland, 2009), which appeal to us for their convenience but are oversimplified and misleading. Even more importantly, we need to become explicitly aware of our implicit biases regarding their relative value and utility in life, values handed down to us over the centuries by historical and ideological forces and which thus may be operating implicitly inside of us. As Hassin (2013) noted, tremendous advances are often made in the sciences when dominant background assumptions are finally put to the test. A good way to start on this path would be to become just as skeptical and evidence-demanding regarding claims of conscious causation of higher mental processes as many are today regarding their possible unconscious causation. As all-too-fallible human beings in search of underlying scientific truths, we should be on our guard against the deep currents and traditions that lead us to cheer for one horse against the other.

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