Part V

Freedom and the Will

Chapter 24

Being Here Now

Is Consciousness Necessary for Human Freedom?

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I do not think, therefore I am.
—JEAN COCTEAU

Although Socrates claimed that the unexamined life was not worth living, the examined life isn't any picnic either. Facing our mortality and the reality and meaning of our existence head on is not something that we generally enjoy doing. To the contrary, we are all quite resourceful in finding ways to avoid any thoughts about such topics (e.g., Becker, 1973; Solomon, Greenberg, & Pyszczynski, 1991, Chapter 2, this volume). And with good reason: Being more honest about the reality of one's life situation is linked to a greater likelihood of depression and suicide (e.g., Alloy & Abramson, 1979; Taylor, 1989). The honestly examined life, therefore, tends to be a pretty scary place.

It is somewhat paradoxical that among all of the earth's creatures, humans are superior both in the ability to recognize and ponder our own mortality and in the capability for mentally transforming our worlds to avoid thinking about it. The ability to detach oneself from the direct control and influences of one's current environment depends crucially on our capacity for mentally transforming and construing that environment (e.g., Mischel, 1973; Mischel, Cantor, & Feldman, 1996). These cognitive transformations enable us both to act when the current situation is unsupportive of that action (such as through a newfound belief in efficacy and agency within that situation; Bandura, 1986; Yalom, 1980) and to not act in the presence of "hot" situational triggers to action (such as when we delay immediate gratification in the service of more substantial and important long-term goals; Metcalfe & Mischel, 1999). Living thus a layer or two detached from the realities of our present situation also permits the operation of comforting "positive illusions" as to the true state of af-

fairs (Murray, Holmes, & Griffin, 1996; Taylor, 1989) so that, like the children of Lake Wobegon, we can all be "better than average" on every dimension.

One such positive illusion—the feeling of control, of personal ownership or responsibility for one's own actions and their consequences (e.g., Langer, 1975)—has powerful social benefits as well. As Prinz (1997) and Bargh (1999) have argued, even if volitional states are determined, people behaving *as if* they have free will and are personally accountable for their actions is of tremendous, even essential, value for the functioning of modern societies. The personal belief in one's own agency has the consequence of infusing one's behavioral options with the normative expectations and guidelines of society at large. The knowledge (or threat) that one will be held accountable by others causes those norms to become very real constraints on one's actions.

The ability to detach our conscious mind from the mundane concerns of the present brings other tremendous advantages to the individual, such as the contemplation at leisure of past events so as to better understand their meaning, causes, and consequences (as Socrates had recommended), as well as the anticipation of and planning for future events (see Gollwitzer, 1999). Heidegger (1927/1962) emphasized this "time-traveling" quality of conscious experience; for him, existence or "Being" was, paradoxically, permeated by non-Being: "the no-longer (Past) and the not-yet (Future) that hold such power and influence over our thoughts and concerns and emotions" (Barrett, 1958, p. 226). A half-century later, Ram Dass (1971) famously urged us to "Be here now," precisely because we usually are not.

However, while we are away time traveling, somebody had better be home minding the store. Regardless of where in time and space our conscious mind is currently focused, we are stuck living in the present, with the strong and continuous need to respond adaptively and sensibly to those present circumstances (see Bargh, 1997). To free the conscious mind to reminisce about the past and to plan for the future, the nonconscious self-regulatory processes to be described in this chapter must be capable of handling the demands of the present. This strongly suggests that deliberate, conscious choice processes are not a necessary element of mundane functioning in the here and now.

CONSCIOUSNESS AND NONCONSCIOUSNESS IN EXISTENTIAL THOUGHT

However, existential philosophers have reified (some might even say deified) the role of deliberate, conscious choice in everyday life as the *sine qua non* of existence—the choices we make, or fail to make, are said to give life its meaning and define who we are as individuals. For Sartre (e.g., 1944), consciousness and freedom were one and the same thing (Barrett, 1958, p. 256). Existential philosophy has had a tremendous impact on contemporary psychology, especially through the humanist tradition which placed conscious choice as central and necessary to nearly all human behavior and judgment (see Bandura, 1986; Mischel et al., 1996; review in Bargh & Ferguson, 2000). In this approach, human freedom is pitted against direct environmental causes or influences on one's behavior such as external coercion and force (whether implied or actual), and gratifying short-term pleasures such as tasty desserts or cigarettes, the consumption of which defeat one's long-term goals. The emphasis on transcending or overcoming environmental control can also be seen as a reaction to the dominance of behaviorism—especially radical behaviorism—within experimental psychology for much of the 20th century (see Bargh & Ferguson, 2000), because behaviorism stressed the role of environmental causes to the exclusion of all others.

Because it equated freedom with conscious choice, existential philosophy was in fact antagonistic toward any conception of human nature in which people were said to be controlled by nonconscious forces. Thus, Sartre (for one) was strongly opposed to the idea of a hypothetical (Freudian) unconscious calling the shots (Barrett, 1958, pp. 254–255), just as he was to the Skinnerian notion of complete environmental hegemony. Sartre and other existential writers (such as Otto Rank) recoiled against any deterministic approach to the human mind, because they felt it let people off the hook too easily regarding the consequences of their actions.

One should keep in mind, however, that all three of these models of human nature—behaviorist, Freudian, and existential/humanist—take rather extreme positions by positing a single dominant cause of human behavior and higher mental processes to the exclusion of any others. The behaviorist stresses the role of the immediate environment, the Freudian the person's unconscious drives and wishes, the humanist the individual's conscious intentions and choice. When, half a century ago, the existentialists/humanists championed the causal importance of conscious choice (Kelly, 1955, Maslow, 1962; Rotter, 1954), they were reacting to the then-dominant behaviorist and psychodynamic conceptions of man. Given this context it is understandable that they pushed their own causal model as hard as they could, in order to best emphasize the importance of conscious choice as opposed to determining unconscious forces or environmental stimuli.

Historically, however, staked-out philosophical stances such as these have had two different, and often conflicting purposes, which need to be carefully distinguished. Both of these purposes in fact date back to the early Greek philosophers. One is a practical or utilitarian form, a "philosophy of life" that provides guidelines and rules for conduct and right living; the classic examples of this were the Stoics and Epicureans (Gottlieb, 2000). Barrett (1958) argued that prior to the advent of academic philosophy, philosophers lived their own lives fully in accord with their deeply held beliefs. Kierkegaard, for example, eschewed a happy domestic life with his beloved because it would interfere with his quest to find God. Sartre's insistence on personal freedom and responsibility is the modern exemplar of this kind of philosophy. Accordingly, existentialism lends itself quite readily to use as a therapeutic method, exhorting individuals against fatalistic acceptance of their lot in life and motivating them to take action to change it if necessary (Rank, 1930/1998; Yalom, 1980).

The other historical purpose of philosophy is to use logic and reason to better understand the universe and how it works, including of course the underlying mechanisms of human judgment and action. More than anyone else, Aristotle is associated with this "scientific" vein of philosophy. It is the stream of philosophical inquiry out of which every modern scientific discipline developed (Gottlieb, 2000)—including, most recently, psychology.

It is notable therefore that the more scientific and empirical of the existential writers, such as Jung (e.g., 1919), gave greater emphasis to the role of unconscious influences in everyday life than did the more practically and phenomenologically oriented existentialists such as Sartre. Let us say then that whereas existential psychology as a whole recognizes the reality of unconscious psychological processes, it chooses to emphasize conscious and intentional processes for the sake of the greater social good.

The modern notion of unconscious psychological phenomena—as in mental processes operating outside conscious awareness and often without conscious intent—has more in common with the mechanistic approach of the behaviorists than the dynamic approach of the Freudians. Today's unconscious is no longer only a hypothetical Freudian construct but an empirically established reality embedded in mainstream cognitive psychological theory (e.g., Hassin, Uleman, & Bargh, 2004; Kihlstrom, 1987). Mainly because of its roots in artificial intelligence research (among others), in which it was not possible or even plausible to

posit intervening deliberate conscious choice processes, cognitive psychology is entirely comfortable with the idea of nonconscious mental and behavioral processes (e.g., Barsalou, 1992). And if the process could not be instigated by acts of free will or conscious choice in these models, then the cause had to be external to the individual (i.e., in his or her environment).

The positing of such environmental causation, however, harkens back to the stimulus–response (S-R) psychology of the behaviorists, which failed as an exclusive and all-encompassing account of human behavior (see Chomsky, 1959; Skinner, 1957). The contemporary theoretical solution to this difficulty has been to permit (as the behaviorists adamantly did not) these external causes to operate in combination with internal psychological mechanisms, such as perceptual, motivational, and behavioral constructs. The external situation or setting activates and puts into motion these internal psychological processes, which then operate in complex interaction with events and stimuli in the outside world—often over extended periods of time, unlike the old S-R psychology. Once activated, these systems operate outside conscious awareness and guidance. This model of human judgment and behavior, in which aware and intentional conscious choice is not a necessary component, has been found to have considerable predictive and explanatory power (Bargh & Ferguson, 2000; Ouellette & Wood, 1998).

CONSCIOUS CHOICE IS NOT ESSENTIAL TO EVERYDAY LIFE

With time and experience, behaviors and decisions that once required a good deal of conscious thought and monitoring no longer do so; they become more efficient in their use of limited attention, and more routinized so that we no longer have to make choices and decisions every step of the way (Bargh & Chartrand, 1999). As William James (1890) put it, consciousness tends to drop out of any process where it is no longer needed. As long as we make the same decisions and choices given the same circumstances, the choice itself becomes redundant with the circumstances, and so those choices start becoming "made for us" in the sense that we behave and react directly, based on what is going on in the environment. All skills develop in this way, gradually receding from the need for conscious control and so being capable of operating nonconsciously (Bargh & Chartrand, 1999).

This principle applies regardless of whether we intend for the skill or process to become automatic. For instance, we may want to become more proficient at driving a car or playing chess, and so we practice these skills, hoping to free our limited conscious attention and thought from details for which it is not really needed—leaving it instead free to plan ahead (looking for potential trouble spots on the road ahead, plotting game strategy) and to be ready for any unforeseen difficulties. But if we always make the same judgment or evaluation of a given object or event, that evaluation eventually becomes automatically associated with the object/event's mental representation, so that it becomes activated (made for us) upon the mere presence of that object/event in one's environment (e.g., Bargh, Chaiken, Govender, & Pratto, 1992; Fazio, Sanbonmatsu, Powell, & Kardes, 1986). One negative consequence of this phenomenon can be the automatic association of stereotypical beliefs and expectations about a social group, on the one hand, with the defining features (e.g., racial or ethnic, gender related, and age related) of that group, on the other hand, so that those stereotypical assumptions become automatically activated on just the presence of a group member in one's environment (e.g., Brewer, 1988; Devine, 1989).

Similarly for our frequently and consistently pursued goals: if in a given situation we tend to choose the same goal, the representation of that goal becomes more and more strongly asso-

ciated with the mental representation of that situation (Bargh, 1990). Thus, eventually that goal comes to be activated automatically when one enters that situation and then operates to guide one's behavior toward the goal—without one consciously choosing or intending to pursue that goal at that moment, and even without the person aware of the real reasons for his or her behavior in that situation (Bargh & Gollwitzer, 1994; Bargh, Gollwitzer, Lee-Chai, Barndollar, & Troetschel, 2001; Chartrand & Bargh, 1996). A wide variety of goals have been demonstrated to become active and operate automatically in this manner, such as goals to judge and form an impression of someone, to achieve high performance on a task, to cooperate with another person,or to protect one's self-esteem (by derogating minority groups) following a failure experience (Spencer, Fein, Wolfe, Fong, & Dunn, 1998).

Such nonconscious motivational effects on one's behavior are likely to be quite common in the "real world" outside the laboratory, as their triggers are the frequently experienced and thought-about social features of one's life—for example, the people we are closest to. Fitzsimons and Bargh (2003) found in several studies that merely thinking about those with whom we have close relationships (e.g., mother and spouse) automatically activates the goals that we pursue when with them—even in situations in which that significant other is not physically present. Like the other nonconscious influences described in this chapter, people are not aware and, in fact, highly skeptical of the reality of such effects on their behavior when informed of them. Because our close relationships are such an important and frequently thought-about part of our phenomenal lives, nonconscious goal operation is more likely the rule in daily life than an exception to it.

In all these experiments, the goal under study is activated in a subtle and often subliminal manner (through what are termed "priming" techniques; see Bargh & Chartrand, 2000), and the participants during careful questioning after the experiment show no awareness of that activation—nor even of the operation of the goal to guide their behavior over extended periods. To give one example, participants primed with the goal of cooperation (so that it was operating nonconsciously) did cooperate in a commons-dilemma game more than did a control group, just as did another group of participants who were explicitly instructed by the experimenters to cooperate. After the "commons" task was completed, all participants gave estimates of how strongly they had been committed to the goal of cooperating with their game partner. In the conscious (explicit) goal group, these estimates correlated significantly with their actual amounts of cooperation shown in the task, indicating that these participants were aware of and could accurately report on their degree of cooperation. Not so for the nonconscious (primed) goal group; their subsequent self-ratings of how much they had just cooperated were unrelated (zero correlations) to their actual amount of cooperation. Thus, not only did these participants not choose or intend to cooperate, they were unaware of the motivation to cooperate that guided their behavior on the task (Bargh et al., 2001, Experiment 2).

In fact, such nonconscious goal pursuit shows all the same qualities as have been found over the years for conscious goal pursuit, including the tendency to resume and complete interrupted goals, and mood effects (happiness vs. dejection) of "succeeding" versus "failing" at a (nonconscious) goal one is not even aware of having (see review in Chartrand & Bargh, 2002).

A final domain of nonconsciously produced social behavior is less motivated and more perceptually or cognitively produced: that driven by the "perception–behavior link" (see Dijksterhuis & Bargh, 2001, for a review). In harmony with very recent findings in cognitive neuroscience of strong associative connections (in the premotor cortex) between the mental representations used for producing a certain type of action oneself and those used to perceive that same action when performed by someone else, social cognition research has shown that

merely perceiving a type of action (e.g., aggressiveness and slowness) in another person makes it more likely one will engage in the same behavior. This "chameleon effect" (so-called because one tends to change his or her behavior to match that of whomever one is interacting with) extends from physical, motor behavior (such as body posture, hand and foot movements; Chartrand & Bargh, 1999) to abstract trait-like behavior (aggressiveness, intelligence, slowness; see Bargh, Chen, & Burrows, 1996; Dijksterhuis & van Knippenberg, 1998).

In all of these nonconscious phenomena, the experimental participant did not consciously choose to think, judge, or behave in the manipulated manner, yet nevertheless did so in much the same manner as when people are explicitly asked to do the same things. By subtle and unobtrusive activation of the mental representations (of objects, situations, goals, another person's behavior, etc.) involved—thus mimicking the effects of those situational features in the natural environment—complex judgments and social behaviors across many content domains were produced without the need for conscious intention and choice or even guidance of the process to completion. And in the automatic motivation research most clearly, the operation of the unconscious process extended over time and involved selective attention and use of environmental information, so that behavior in pursuit of a particular goal was adapted to the specific unfolding environmental events—and so goes far beyond simple, direct S-R control of single concrete behaviors (see Bargh, 2004).

Because this accumulating evidence is clearly against the necessity of conscious intention and choice in a wide variety of complex human activities, so existential philosophers such as Kierkegaard and Sartre likely were off target in highlighting consciously made choices as the quintessential human characteristic. Moreover, instead of being seen as antagonistic, competing centers of causal power, the individual's environment and his or her unconscious mental processes—in interaction with the goals, beliefs, values of the individual—are better considered as supportive and even essential contributors to successful adaptation and self-fulfillment. And, finally, given that the historical purpose of existential philosophy is not the defense and maintenance of a particular answer to the meaning of human life (namely, the uniqueness of conscious choice) but instead the rigorous and objective pursuit of the truth of the matter, whatever that might be, it becomes paramount for existential philosophy and psychology to reexamine the hypothesized central role of conscious choice. Indeed, one important contribution that an experimental existential psychology could make to existential philosophy more generally would be to provide the best scientific answers possible about the true causal role of human consciousness in producing one's daily life.

REASON VERSUS CHOICE AS THE ESSENTIAL HUMAN CHARACTERISTIC

Traditionally, philosophers from Aristotle onward have looked for what it means to be human by focusing on the important or key differences between humans and other animals. For Aristotle, the "final cause" or purpose of a thing was what it naturally does, that other things do not do—its "distinctive function" (Gottlieb, 2000, p. 266). For example, the function of the eye is to see and the function of a chair is to be sat on. The distinctive function of humans, according to Aristotle (*Nicomachean Ethics,* X, p. 7), is the use and application of reason and intelligence in daily life. Therefore the path to fulfillment and complete expression of his or her inner essence is for the individual to regularly engage in rational and intelligent thought and action.

Aristotle's emphasis on pure thought and reason as the core of existence was greatly influential during the Renaissance and Enlightenment; exemplified by the *Cogito ergo sum* of

Descartes, which equated Being with consciousness. Still, it culminated in the writings of Kant, who subjected important philosophical concepts and categories to rigorous, rational analysis. This included the concept of existence, which Kant concluded was an empty and rather meaningless concept because saying that an object exists tells us nothing new about it (see Barrett, 1958, p. 162).

Starting with Kierkegaard, however, existentialist writers took issue with the validity of Kant's analysis, arguing that existence was not merely an abstract mental concept but a reality of every person's life. They did not see thought or reason as an abstract process detached from the realities of life one's own life, as did Plato with his ideal Forms, but more as Aristotle did, as being fully involved with planning, making choices, and performing intentional actions (Gottlieb, 2000, p. 267). For instance, Kierkegaard emphasized the "either/or" of (conscious) choice as giving life its meaning; he held that "any man who chooses or is forced to choose decisively . . . experiences his own existence as something beyond the mirror of thought. He encounters the Self that he is, not in the *detachment* of thought, but in the *involvement* and pathos of choice" (Barrett, 1958, p. 163).

It is interesting that both Kant and Kierkegaard followed Aristotle's lead in equating the meaning of existence with the intellect and reason yet emphasized separate and distinct aspects of intellectual activity—Kant the abstract, pure reasoning aspect and Kierkegaard the choice and planning aspect. Although both are forms of human mental life that presumably distinguish us from other animals, they are not the *same* form. Kierkegaard, in fact, distinguished between the two as the *esthetic* and the *ethical* modes of existence; the former corresponding to the abstract, pure domain of thought and perceptual experience, and the latter to the mundane, down-to-earth choices of action one has to make in the course of living one's life. He argued that life is actually lived at the ethical, not the detached, esthetic level (Barrett, 1958, p. 167).

"I CHOOSE, THEREFORE I AM"

Sartre (1944) also equated Being with conscious choices, strongly denying even the existence of an unconscious or nonconscious mind. In this way, Sartre's philosophy was very much a direct descendant of Cartesianism—the identification of mind with consciousness:

> A Cartesian subjectivity (which is what Sartre's is) *cannot* admit the existence of the unconscious because the unconscious is the Other in oneself, and the glance of the Other, in Sartre, is always like the stare of Medusa, fearful and petrifying[1] . . . In fact, Sartre denies the existence of an unconscious mind altogether; wherever the mind manifests itself, he holds, it is conscious. A human personality or human life is not to be understood in terms of some hypothetical unconscious at work behind the scenes and pulling all the wires that manipulate the puppet of consciousness. (Barrett, 1958, pp. 254–257)

Sartre's notion of human freedom developed out of extreme and exceptional circumstances: his experiences in the French Resistance during World War II. Existence and being were demonstrated by the conscious choice of "saying no" to the oppressing Nazi occupation forces. But as this was an exceptional circumstance, what then about the normal, usual, everyday conditions in which a human being fulfills his or her existence? Because Sartre's philosophy (like Descartes') acknowledges only conscious thought, it is limited or undermined to the extent that automatic or nonconscious mental processes are found to guide and govern everyday life.

Yet as a philosophy of and guide to life—as opposed to a rigorous and unflinching attempt at getting at the truth of existence—the reality of conscious choice may not matter. Sartre did, after all, "advance his view as a basis for humanitarian and democratic social action" (Barrett, 1958, p. 244). But if we are unconcerned about the truth of existence, why not go all the way back to Descartes and the pre-Enlightenment days and posit God or some other supernatural entity as the causal force? If we are bravely facing the realities of our existence, in all their apparent absurdity (*pace* Camus) then we need to face this one as well. Nietzsche announced that God was dead, Sartre fulfilled Nietzsche's prophecy by replacing God with man, and the capacity of man that inspired Sartre to do so was conscious choice. However, if conscious choice is an illusion, what then are we left with? Perhaps, as Barrett (1958, p. 244) suggested, we are back "in that anguish of nothingness in which Descartes floated [in his skepticism] before the miraculous light of God shone to lead him out of it."

DON'T TRUST THE FEELING OF WILL

One might argue that Sartre and others were being quite sincere and objective when they concluded, based on their subjective experiences, that conscious choice is the source of human freedom (and uniqueness). Following this phenomenological approach, one can easily come to believe in the power and causal efficacy of conscious choice in one's life—yet here is a case of subjective experience being suspect. When Descartes took on the ruthlessly skeptical stance that ultimately produced the *Cogito*, he rejected the certain validity of all of his subjective experience *except* for his own conscious thought. But Wegner's (2002) recent empirical research on the experience of choice and free will now gives us more reason than mere skepticism not to trust our subjective experience as a guide to truth in this matter.

Wegner has demonstrated that we do not experience the causal role of choice and will directly, as Descartes claimed, but only as the result of an inference, or causal attribution, based on the covariation of our thoughts and our actions. Most critically, Wegner's research has shown that manipulation of the factors presumed to underlie these attributions does produce subjective feelings of conscious choice and free will where they actually played no role in the outcome. Whether or not Wegner is ultimately found to be fully correct that the experience of conscious will is an illusion, his demonstrations on this point show at the very least that even the presumed phenomenological bedrock of the *Cogito* cannot be trusted. It too, is suspect, or at least potentially misleading, as a source of evidence.

This is part of a larger, more abstract problem with using subjective experience, including thought experiments, as the evidentiary basis for conclusions about human nature. For one thing, Beauregard and Dunning (1998), Wilson (2001), Pronin, Lin, and Ross (2002), and others have presented considerable evidence that we really do not know ourselves very well—mainly because all sorts of motivational biases and other hindrances get in the way of the accuracy of causal statements about ourselves (but not, so much, about others). Therefore, introspective evidence can be useful, suggestive, and even highly compelling (as it was to Descartes), but it should not be granted the status of direct and self-evident proof.

It could also be argued that Kierkegaard and Sartre were referring specifically to extreme conditions and circumstances—saying no to the dictator and his army, saying no to the corrupt and venal authority of the Church—and not to the typical daily life of individuals. Such a retreat raises other problems, however. The most obvious is that it leaves the "final cause"—the defining function or purpose—of human beings in the odd status of not existing under normal conditions. Another difficulty is the possibility that even un-

der extreme circumstances there is no real conscious choice made. Wegner's research makes us wonder about the true causal role of any phenomenal experience of choice, for important and consequential decisions as well as for relatively innocuous responses in laboratory experiments (cf. Kuhl & Koole, Chapter 26, this volume). My suspicion is that there may be less actual choice involved in the extreme and pivotal moments emphasized by Kierkegaard and Sartre than in relatively trivial and mundane matters. One needs only to consider Martin Luther's famous words, when called to defend his life in front of the Church at the height of its power: "Here I stand; I can do nothing else." Why did he have this strong feeling, at the most crucial moment of his life, of actually having no choice at all? Luther was, I think, expressing his belief that his dramatic and incredibly consequential choice had been determined already for him by his beliefs, values, and past public statements and behaviors.

Perhaps, then, we should take Luther's words at face value. Pelham, Mirenberg, and Jones (2002) have recently shown that the sharing of seemingly superficial and trivial features, such as the letters in one's name, with those of potential occupations and places to live, significantly influences those major life decisions. Several studies examining census data, telephone directories, and social security records showed that, among other things, people were more likely to move to states and cities with names similar to their own names than other possible places to live. For example, there are disproportionately more Carols in Carolina, Phils in Philadelphia, and Kens in Kentucky than in other cities and states of comparable sizes. But people do not accept that these similarities played any role in their choice of where best to live, work, and raise a family, because they did not—at any conscious level, that is.

THEN WHAT *DOES* IT MEAN TO BE HUMAN?

An argument can be made that the human capacity for learning and using language (and at such an early age with very minimal experience of it) is part and parcel of another, more fundamental difference—the ability to absorb and acquire culture (e.g., Baumeister, 2004; Donald, 2001). No other animal accumulates learning and passes it along to subsequent generations at a level even approaching that of humans. As a result, none of us has to acquire local wisdom and knowledge by our own experience alone, repeating the mistakes and missing the same opportunities as did our ancestors. Instead, we stand on the tall shoulders of thousands of generations of predecessors.

This is a wonderfully flexible and adaptive arrangement, through which we soak up the local guidelines for behavior as well as the local knowledge of the environment—for example, every human being is born with the ability to learn and speak any language and absorb as second nature any human cultural system, depending on where in the world he or she happens to be born and raised (Donald, 2001). Here is one major clue that—far from being designed by nature as a way to oppose or countermand the influences of one's environment—the human mind allows us to uniquely adapt to and modify our behavior patterns effectively within that environment.

BEING HERE NOW

Recent evidence in the domain of comparative brain evolution strongly supports this idea. Whereas there is, overall, a high degree of overlap and similarity in brain structure and func-

tion between *homo sapiens* and our nearest primate relatives, one of the clear differences is in the capacity for building new, nonconscious skills. This involves a connection or pathway between the cerebellum (which compiles and stores the learned procedures) and the frontal lobes (which "load" and operate those procedures in the current environmental context), which, as Donald (2001) stresses, is *16 times* the proportional size in humans compared to the next closest primate. In other words, instead of possessing only a fixed set of rigid, innate predispositions or task-specific "demons" as do other animals (which determine for them what to attend to, how to behave, etc.), we build and develop them ourselves to fit our particular local environments and the goals and purposes we pursue within them. These not only reflect our own personal, local behavioral contingencies—based on our own particular cultural mores, norms, and reward structure—but also our own personal, idiosyncratic desires and goals (Bargh, 1990). Out of our idiosyncratic history of experience, then, develop ever more complex and abstract mental representations that come to guide our functioning on a moment-to-moment basis. Again, this frees our mind from much of present concerns, enabling it to plan for the future or consider the past.

Social cognition research too shows that our social knowledge structures—our expectancies and predictive models of social situations—naturally and automatically adapt to reflect both the long-term frequencies of events and the short-term, current situation (Higgins & Bargh, 1987). Moreover, those structures that reflect the contingencies of the current situation (including those representing our own current goals and needs) dominate the effect of the long-term expectancies when the two are in conflict (e.g., Bargh, Lombardi, & Higgins, 1988). In this fundamental, mechanistic, and nonconscious way, the human mind adapts flexibly to the realities and contingencies of the current environment.

Unlike the humanists' and existentialists' view, then, the human mind is not constantly in a struggle with the environment over control of our behavior. Instead, it adapts to and integrates itself with that environment with an exquisite degree of sophistication. Situational features activate and put into motion our own idiosyncratic chronic goal pursuits within that situation (Bargh, 1990), and we can even delegate future control over our behavior to the environment, setting up temporary contingencies in advance ("When X happens, I will do Y") to unfold automatically at the later appointed time (Gollwitzer, 1999). In these ways we strategically *use* the fact of environmental control championed by Skinner (e.g., 1957) to our own advantage.

CONCLUSIONS

Existential questions such as the role of consciousness and the extent of human freedom are no longer solely the domain of philosophy; they have finally become tractable through scientific methods. All the sciences spun off from philosophy once empirical methods and tools had been developed to enable the central issues to be investigated empirically (Gottlieb, 2000); it is only very recently that we have been able to do so in the case of free will and the functions of consciousness.

So, then, what does this new scientific study of free will tell us? First, that concurrent with the historical development of a conscious mind that is capable of transcending the present environment was the development of "backup" or default nonconscious capacities for dealing with that present (Bargh, 1997). Basic evaluative, comprehensional, motivational, and behavioral systems have been found to operate without the need for conscious choice or guidance—independently of conscious concerns but dependent on appropriate environmental circumstances and features. In essence, these automatic response systems keep the indi-

vidual appropriately grounded in the present, so that the conscious mind can more safely examine one's past (via memory) and plan for one's future.

These nonconscious support systems also buffer one's conscious, phenomenal experience from the moment-to-moment mundane realities of one's present existence, providing layers of protection from the direct appreciation of and awareness of those realities. This helps the great majority of us avoid the pitfalls of depressive realism.

But if we are not consciously in control of our behavior on a moment-to-moment basis, and if conscious choice processes do not play a causal role in our mundane and possibly even important life decisions, then they cannot be the human *raison d'être*. Perhaps it is not so important for us after all to overcome or countermand the influence and forces of our environment, as many existential and humanist thinkers have it, but instead to adapt ourselves to that environment so completely and implicitly that we become its master. Knowing our local worlds so well that we anticipate its events and contingencies well before they occur, and having developed skills and behavioral repertoires that can take advantage of those events quickly and efficiently in the service of our important goals and needs, keeps us many steps ahead of the game. We create and compile these sophisticated nonconscious goal-pursuit skills through our conscious experience (Bargh & Chartrand, 1999; Donald, 2001). Thus, compared to existential philosophy, experimental existential psychology suggests a different approach to the question of the meaning of existence: Why try to beat the world, when it appears we were made to join it?

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NOTE

1. There is a long historical tradition of treating nonconscious influences on behavior as somehow non-human; in fact prior to Freud's location of the source of irrational or counternormative behavior in the unconscious, such behavior was widely believed to be the result of demonic possession (Bargh & Barndollar, 1996). Anything, it would seem, but to accept it as a natural and even essential part of existence.

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