Reflections and Reviews

Losing Consciousness: Automatic Influences on Consumer Judgment, Behavior, and Motivation

JOHN A. BARGH*

Consumer research has largely missed out on two key developments in social cognition research: the growing evidence that much of social judgment and behavior occur without conscious awareness or intent and the substantial moderating influence of social- and self-related goal pursuits on basic cognitive and reasoning processes. This evidence is described and its implications are drawn for nonconscious—including subliminal—influences on consumer behavior. The consumer research domain appears ideal for the necessary next wave of this research: the assessment of how much of a role nonconscious influences play in real life in decisions and behavior that are of real consequence to the individual.

To what extent are people aware of and in control of the influences and reasons for their purchasing and consumption behavior? Although in the past decade of consumer research there has been increasing attention to the possibility that there may be automatic or nonconscious influences on choices and behavior, the field still appears dominated by purely cognitive approaches, in which decisions and actions are made deliberately. Not only does the role of nonconscious processes seem underplayed, relative to contemporary social psychological models, so too do directive motivational influences on reasoning and behavior. My own goal in this article is to describe briefly the recent developments in automatic and nonconscious research in social cognition, consider their relevance to consumer behavior, and then consider their implications for future directions in consumer research.

I am not the first to point to the nonconscious nature of

much of human behavior (see, e.g., Alba 2000; Loewenstein 1996). However, much of the previous discussion within consumer research has treated nonconscious influences as hedonic impulses, which, if they reach expression in behavior, reflect a failure of volitional control or a weakness of will (Alba 2000, p. 3; Baumeister 2002). Instead, I seek to expand the consideration of nonconscious motivations beyond hedonic impulses and physiological need states (such as in addiction) to the operation of any kind of goal or motivation a person can have consciously, such as self-protective motivation, performance- or achievement-related motivation, and interpersonal goals.

According to the recent major surveys of consumer research (Cohen and Chakravarti 1990; Jacoby, Johar, and Morrin 1998; Simonson et al. 2001), the major emphasis is on purchase decisions, with a dominant cognitive approach to understanding how they are made. This cognitive orientation takes two main forms, social cognition and behavioral decision theory. The most influential social cognition models are the elaboration likelihood model (ELM; Petty, Cacioppo, and Schumann 1983) and the heuristic-systematic model (HSM; Chaiken 1980); the predominant paradigm of decision research is an information-processing model. All of these major approaches posit consciously made, deliberate choices and decisions. The social cognition models are

mainly concerned with the conditions under which people do, versus do not, engage in careful, effortful processing of the information contained in persuasive messages. In this research, even when the experimental participant is not processing effortfully but instead is relying on simplifying shortcuts, she is still focusing her attention on the message, intentionally processing it, and then reporting a consciously formed attitude or opinion.

Since 1980, however, there have been two important developments in social cognition research that would appear to be highly relevant to consumer research. These are the substantial role played by nonconscious processes (and the minimal role played by deliberate, effortful processes) in psychological and behavioral phenomena and the central and modifying role of needs and goal pursuits. Because of the continued reliance of consumer research on the 1980-era models, these new developments have not yet had much impact. However, to the extent that consumers are behaving without conscious awareness and guidance, models that assume the consumer's deliberate and effortful scrutiny of the choice or behavior will likely miss much of the character and flavor of consumer behavior in situ.

CONSCIOUSNESS DETHRONED

The early social-cognitive models were based mainly on research in controlled, quiet, distraction-free settings in which the participant gave his or her full attention to the particular stimuli presented, had plenty of time to consider his or her response, and tried reasonably hard to follow the instructions given explicitly by the experimenter. But soon, researchers began to ask to what extent these models applied to the real, complex, noisy, and busy world outside of the laboratory and to what extent people spontaneously pursued the particular goals given to them by psychology experimenters. As it turned out, the main feature that dropped out of these models as they were studied under more naturalistic conditions was the role played by deliberate conscious choice processes (see Bargh and Chartrand 1999 for a review). For example, Fazio et al. (1986) showed that evaluations of the objects and events in one's environment were made in an immediate, automatic manner, upon the mere presence or occurrence of that object or event. Causal attributions were found to be made substantially through automatic and nonconscious means (e.g., Gilbert 1989), and behavior in social interactions was found to be influenced automatically by social-perceptual mechanisms (Bargh, Chen, and Burrows 1996).

The most recent developments have been in the area of social behavior and goal pursuit. What is most striking about these varied demonstrations of nonconscious influences is that the effects are obtained by the mere, passive activation of the relevant mental concepts, such as intelligent, polite, power, cooperation, and achievement. Most research has produced the activation of these concepts through priming manipulations that typically involve exposure to the concept and close synonyms in the context of an allegedly unrelated prior experiment.

For example, if you present a subject with adjectives related to politeness, in the course of an ostensible language test in which she constructs grammatical sentences out of series of words presented in a scrambled order, and then give her a chance to behave in a polite manner (e.g., waiting patiently for the experimenter to end a conversation with another person), she will exhibit greater politeness (i.e., wait longer before interrupting) than will participants in a control condition (Bargh et al. 1996, experiment 1).

Motivations and goal pursuits can be activated and put into operation in the same way (Bargh et al. 2001). For example, priming the concept of achievement causes participants to work harder and score higher on a verbal task, while priming the concept of cooperation causes them to return more of a common resource (fish in a smallish lake) in order to maintain and continue that resource for all. Not only are people unaware that these goals have been activated but they also are unaware of their operation, even though they are behaving in ways to attain that very goal. Moreover, nonconscious goal pursuits display all of the same features as does (volitional) conscious goal pursuit, such as flexibility, persistence, and effects of success and failure on mood (Chartrand and Bargh 2002).

One might object that these findings are only the results of clever tricks in contrived experimental settings and are not typical of normal, "real world" functioning. Indeed, Clore and Ketelaar (1997) have suggested that these demonstrations of nonconscious influences are analogous to hot-wiring a car: "Automobiles, for example, are not designed to be started with a screw driver and wire clippers, but we all know that the design of a car allows such hot-wiring to happen" (p. 116). To this reasonable point two rejoinders can be made. First, the evidence in support of nonconscious goal pursuit is obtained under conditions that as much as possible mimic those in the real, nonlaboratory world. Ideally, the dependent measure is taken when the participant believes he or she is entirely outside of an experimental situation—when arriving, when between different studies, or when leaving the lab. In one study, for example (Bargh et al. 1996, experiment 2), participants were first primed, or were not primed, with stimuli related to the elderly stereotype, and the dependent measure was how quickly they walked down the hall when leaving the experiment. Other studies of nonconscious goal pursuit employed natural settings that were expected to automatically activate that goal, such as priming power-related goals by having the participant sit in the professor's versus the guest chair in the professor's office (Chen, Lee-Chai, and Bargh 2001).

Second, the original priming studies from the 1960s and 1970s were not laboratory studies but were carried out in the field. These concerned the impact of the presence of aggressive cues such as weapons on subsequent aggressive behavior (Turner, Layton, and Simons 1975), the impact of exposure to television violence on aggressiveness in children (Belson 1978), and the impact of witnessing helpful acts on subsequent likelihood to help a person in need, such as a stranded motorist (Bryan and Test 1967). Those studies

showed consistently strong influences of contextual primes on behavior in real world settings; indeed, the model of aggressive cues developed in the laboratory holds even more strongly when it is tested in the field (Bushman and Anderson 1998).

Still, much more needs to be done to test the extent of influence that the recently discovered forms of nonconscious processes have in normal, everyday functioning. The realm of consumer research would seem to be the ideal playing field on which to establish whether the new models of automatic goal pursuit and automatic evaluation processes do, indeed, apply in the real world, for consumer research involves the study of circumstances in which the person is motivated and involved, where his or her money is on the line, and where the outcome of choices matters to his or her health or happiness.

EXPANDING THE STUDY OF CONSUMER MOTIVATIONS

In order to bring the study of nonconscious motivation into the consumer realm, the range of consumer motivations that are considered needs to be expanded. Perhaps as a legacy of the influential ELM and HSM models of the early 1980s, the motivation to engage (or not to engage) in effortful consideration of a decision or judgment (based on economic calculations of personal cost and benefit for doing so) seems to be the dominant kind of goal or motive studied in contemporary consumer research (for an important recent exception, see Ratneshwar, Mick, and Huffman 2000). But in the real world, people have many other goals and needs. Aside from (occasionally) being motivated to effortfully process product-relevant information or advertising content or to deliberately make choices about which products to buy, people have things they need to get done and pressing concerns on their minds. We want others to like us and to want to be with us; we want to perform well and to achieve success, to ensure our family's safety and security, and to present ourselves to others in a positive, attractive light. Social cognition research over the past 20 years has emphasized the moderating role of these varied motivations for cognitive processes such as attention and judgment (e.g., Tesser, Martin, and Cornell 1996).

The importance of including these various motivations in the research mix is that the particular goal in place changes everything—the focus of attention and the evaluation of objects and events, as well as memory for events (e.g., Bruner 1957; Lazarus 1991). For instance, the currently operating goal drives appraisal and evaluation of objects and events in the current environment (Ferguson and Bargh, forthcoming). To the extent that these help to satisfy the goal, they are positively evaluated and approached; to the extent that they thwart or interfere with goal pursuit, they are negatively evaluated and avoided. Activate intimacy needs or goals, and then products that can help one become more attractive, such as cosmetics or grooming products, should be more positively evaluated than otherwise; activate

health-related goals, and the person should evaluate groceries in terms of his or her health values and their implications; activate gratification or hedonistic goals, and the food's tastiness will dominate the evaluations (see Ramanathan and Menon 2001). Competition goal operation should cause one to evaluate status-oriented products more positively, while egalitarian or responsibility-related goals would cause a more negative evaluation of those same products, and so on.

My point is that all of these goals can be activated, and then operate, all outside of awareness. If they are operating nonconsciously, the person will not be aware of their influence on his evaluations and behavior. The above research shows that the technology and knowledge now exist to activate these goals without the person's awareness.

NONCONSCIOUS INFLUENCE: SPECTER AND REALITY

There are two ways to deliver nonconscious primes: either subliminally, in which case the primes themselves are not accessible to the person's awareness, or supraliminally, in which case the person is aware of the primes but not of their potential influence. Both forms have been shown to be successful in influencing judgments, motivations, and behaviors in social cognition research (Bargh 1992).

Subliminal advertising and subliminal influence attempts more generally have a controversial and checkered past. Indeed, one reason why consumer research seemed to shy away from the study of motivational influences over the past 40 years is the legacy of Vance Packard's 1957 book *The Hidden Persuaders*. Packard proclaimed that market researchers of that time were able to determine people's unconscious motives and that the consumer was powerless to resist these techniques. As evidence, he trumpeted claims of powerful subliminal advertising effects in movie theaters. The book, published in an era of prisoner of war brainwashing attempts and cold war paranoia, was a sensation and gave the scientific study of consumer motivations an unsavory public image.

However, the early reports of subliminal ads in movie theaters turned out to be a hoax, and then the first reviews of the effectiveness of subliminal advertising showed weak effects at best (Moore 1982). Next, experimental tests of the effectiveness of commercially available subliminal self-help tapes found them to be no more effective than placebo tapes (Greenwald et al. 1991).

Today, most people remain concerned about the possibility of being influenced by subliminal messages (Wilson and Brekke 1994), and perhaps now, finally, they should be. Contemporary researchers are consistently obtaining subliminal effects on consumption and product evaluation. What has changed?

The main reason for the recent success is that researchers are taking the consumer's (experimental participant's) cur-

rent goals and needs into account.[1] Lewin's influential field theory (1951) held that one could not induce in people goals they do not already have themselves, but you could influence them by activating or manipulating the goals that they already possessed. The most recent work on subliminal influence exploits this principle by matching the subliminal stimulus with the subject's current goal or need state; it also makes use of known effective primes. Thus, Berridge and Winkielman (forthcoming) subliminally presented subjects with a happy, a neutral, or an angry face. Those who had been shown the happy face subsequently evaluated a fruit-flavored drink more favorably and also drank substantially more of it than did neutral-primed participants. Those who had been shown the angry face drank least of all. Most important, these effects held only for those participants who were thirsty (having been instructed not to drink anything for hours before the experiment); the evaluations and drinking behavior of nonthirsty participants were unaffected by the same subliminal primes.

Strahan, Spencer, and Zanna (forthcoming) subliminally primed thirstiness and caused thirsty, but not nonthirsty, participants to drink more of a purportedly thirst-quenching beverage ("SuperQuencher") than of a purportedly energy-giving beverage ("PowerPro"). In another study, they primed sadness and thereby caused participants to prefer listening to a CD purported to put them in a good mood rather than to a CD of music described as strong and powerful. Again, in both studies non-goal-primed participants did not show these effects. For the subliminal effects to occur required the match between the needs and goals of the participant and the needs that the product was alleged to satisfy (see also Dijksterhuis et al., forthcoming).

With subliminal primes, the individual has no chance of controlling the influence; as they used to say of Bob Feller's fastball, you can't hit what you can't see. But most stimuli in real life as well as in advertising are in one's plain view. Supraliminal influence attempts, including goal activation, can be as effective—if not more effective—than subliminal priming. What is critical is that people not be aware of how the primes might affect them. Given our general overconfidence in our ability to be aware of the important influences on our judgments and behavior, as well as in our ability to control any unwanted influence, this condition is met much of the time. After all, almost all external, environmental influences on our behavior involve stimuli and messages that are in plain view, yet either we do not realize that the influence is taking place (Wilson and Brekke 1994) or we are overconfident as to our ability to control any such influences (Bargh 1999b). As an example, we routinely bemoan negative or "dirty" political campaign advertising and insist that such ads do not affect our own vote, yet the reason such ads do not go away, and even increase in frequency each election season, is that they are, in fact, quite effective.

There are, however, situations and contexts in which we are aware of attempts to influence us and even of how that attempt might operate. Millions of people watch the Super Bowl football telecast in part to see the new (and very expensive) ads, fully aware while watching them that they are trying very hard to influence us in some way. We know full well that repeated ads asking, "What is mLife?" without ever telling us are trying to incite us to go to the displayed internet address to find out (and so we can resist this impulse). These are the very cases in which subliminal influence attempts will likely prove to be more successful than supraliminal (conscious) ones.

THE USE AND ABUSE OF NONCONSCIOUSNESS

It would be naive to think that recent advances in knowledge of nonconscious processes will never be exploited to serve a company's or a government's purposes against the interests of consumers or citizens. Therefore, within the field of consumer research, there are choices to be made concerning how to approach the study of nonconscious influences. Here the question neatly becomes, Who is the intended consumer of that research? Who is the master being served?

Nearly 40 years ago, Robert Perloff (1964) wrote that in the first half-century of industrial psychology's existence, the overwhelming amount of research treated the consumer "as an individual whose attention and purchasing behavior are coveted to serve ends . . . determined by advertising and the mass media" (p. 33). According to the recent reviews of the field, not much has changed, and most research still is devoted to influences on purchase decisions (Simonson et al. 2001, p. 255). Perloff concluded that the benefits of consumer research for the individual in society would be greatly multiplied if researchers directly and explicitly targeted the consumer's motives and needs.

In Perloff's day, the idea of "hidden persuaders" was indeed a matter of bluff and, to some extent, hysteria. But no longer. If researchers had a responsibility in 1964 to serve the consumer, how much more of a responsibility is there today, when methods to thwart or bypass the consumer's defenses against influence are becoming ever more powerful, and yet he remains as ignorant of these influences and as overconfident of his control as in the past?

There is a way that contemporary consumer researchers can live up to this responsibility. In social cognition research, the 1980s saw growing evidence of the nonconsciousness of stereotyping and prejudice—of these being automatic, unintended, and possibly even uncontrollable influences on judgment and behavior toward the stereotyped group. The response of the field was a massive research effort, that continues today, into ways in which people could overcome these influences and regain control (see Bargh 1999a). Perhaps consumer research should begin to balance studies of how to influence the consumer's choices and behavior with studies of how she can defend against and control such

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[1] The other reason is that priming researchers are using techniques that work, such as multiple presentations of the subliminal prime instead of just one and using single words instead of entire sentences that need to be parsed (see Dijksterhuis, Aarts, and Smith, forthcoming).

unwanted influences. Researching both sides of the issue of nonconscious influence would also provide the strongest and most relevant evidence to date on the basic and important research question of how powerful and typical nonconscious influences are in daily life, because consumer research is the study of choices and behaviors that really matter to the individual.

[*David Glen Mick served as editor for this article.*]

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