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The Automaticity of Social Life

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Abstract

Much of social life is experienced through mental processes that are not intended and about which one is fairly oblivious. These processes are automatically triggered by features of the immediate social environment, such as the group memberships of other people, the qualities of their behavior, and features of social situations (e.g., norms, one's relative power). Recent research has shown these nonconscious influences to extend beyond the perception and interpretation of the social world to the actual guidance, over extended time periods, of one's important goal pursuits and social interactions.

Keywords

social cognition; automaticity; unconscious

Automaticity refers to control of one's internal psychological processes by external stimuli and events in one's immediate environment, often without knowledge or awareness of such control; automatic phenomena are usually contrasted with those processes that are consciously or intentionally put into operation. Given the historical focus of social psychology on social problems (e.g., discrimination, aggression), it is important to understand the extent to which such negative outcomes might occur without the person's awareness or despite his or her good intentions.

But just because social psychologists tend to study social problems does not mean that automatic processes produce only negative outcomes. To the contrary, much current automaticity research has focused on how nonconscious processes contribute to successful self-regulation and adaptation. As traditional approaches to self-regulation have emphasized the role of conscious, controlled, or executive processes in overcoming impulsive reactions or bad habits, the potential role of nonconscious self-regulatory processes has been somewhat overlooked until recently. But because only conscious, controlled processes can “time-travel”—when the person remembers the past or anticipates the future—nonconscious processes become essential for keeping the individual grounded adaptively and effectively in the present (Bargh, 1997). In terms of contemporary dual-process approaches to cognition, then, nonconscious processes appear to serve a default, background regulatory function, freeing the conscious mind from the concerns of the immediate environment.

SOCIAL PERCEPTION

Much of the early automaticity research in social psychology focused on social perception—the degree to which people's impressions of others are driven by automatic biases. A widely studied source of such bias has been the accessibility of social-behavior representations (i.e., trait constructs such as “intelligent” or “shy”). The automatic use of a given construct to interpret the meaning of someone else's behavior occurs either when one has frequently used that construct in the past (i.e., chronic accessibility) or when one has recently used that construct in some unrelated context (i.e., priming or temporary accessibility). Priming manipulations typically seek to passively and unobtrusively activate the construct in question by having the participant think about or use it in an early phase of the experiment (e.g., a “language test”) that is ostensibly unrelated to what follows.

In general, early automaticity research showed that several different forms of social representations become automatically activated in the course of social perception, triggered by the presence of their corresponding features in the environment. The race-, gender-, or age-related features of another person can automatically trigger group stereotypes associated with them; one's consistent affective reactions toward social objects (specific individuals, groups) can become automatically activated upon the mere perception of those objects; and features of one's significant others (e.g., mother, close friend) can automatically activate the specific mental representations of these individuals (see review in Wegner & Bargh, 1998).

Indeed, most automatic effects on social life are mediated by the nonconscious activation of social representations—either *preconsciously* through direct activation by strongly associated stimuli in the environment (as in racial stereotyping effects) or *postconsciously* through recent, conscious use in an unrelated context (as in most category-priming effects). Given the important mediational role played by these structures, current research has focused on discovering the types of information stored within them (e.g., evaluations, goals, trait concepts), as it is these contents that then automatically guide thought and behavior.

THE PERCEPTION-BEHAVIOR LINK

Under the hypothesis that whatever representations become active in social perception will also tend to directly influence behavior, initial tests of automatic social behavior used the same priming methods as in the prior social perception research to subtly activate trait constructs. However, instead of being asked for their impressions of a target person, participants were put into a situation in which they had the opportunity to act (or not) in line with the primed construct. In an initial study, participants who had been unobtrusively exposed to (i.e., primed with) instances of the concept “rude” were considerably more likely to interrupt a subsequent conversation than were those primed with the concept “polite” (Bargh, Chen, & Burrows, 1996; see Fig. 1).

The logic of the perception-behavior link is that it should apply to any knowledge structure automatically activated in the course of social perception. Social or group stereotypes are one well-researched example. In the course of social perception, people tend to automatically encode minority-group members in terms of their associated stereotypes. Because stereotypes become automatically activated by the mere perception of group features (e.g., skin color) in an individual, the activated stereotype should produce stereotype-consistent behavioral tendencies.

Over the past decade, many studies have obtained just this result. Subtle priming of the stereotype of the elderly (which includes the notions that the elderly are forgetful, as well as physically slow and weak) caused college students to walk more slowly when leaving the experimental session (in one study) and to subsequently have poorer memory for the

features of a room (in another)—both effects predicted from the content of that stereotype. Stereotypes associated with social roles produce similar effects: Priming the professor stereotype led to students answering a greater number of questions correctly in a trivia game (see review in Dijksterhuis & Bargh, 2001).

NONCONSCIOUS GOAL PURSUIT

Another potential mechanism by which the social environment can directly influence social behavior is through the activation and operation of *goal representations* that have become strongly associated with a particular situation. If an individual repeatedly chooses to pursue a certain goal in a situation, then eventually merely encountering that situation is enough to automatically activate the goal and put it into operation (see Bargh, Gollwitzer, Lee-Chai, Barndollar, & Troetschel, 2001). For example, a parent who chose to forego her own interests and instead pursue her child's best interests, when there was a conflict between the two, eventually would come to act in her child's interests without having to think or consciously decide to; another person who tended to put her own interests first would eventually, over time, automatically pursue her own goals instead of those of her child.

Tests of this model have used the same priming procedures as discussed above to activate a variety of goal representations; the effects of the primed goals are then assessed across a variety of dependent measures. These have included not only cognitive and behavioral consequences of the goal pursuit, but also classic qualities of motivational states such as persistence in the face of obstacles and resumption of interrupted tasks. This research has shown that when a goal is activated outside of the participant's awareness, the same outcomes are obtained as in previous research on conscious goal pursuit. For example, in one study, subliminal priming of a cooperation goal produced the same increase in cooperative behavior as did explicit, conscious instructions to cooperate (Bargh et al., 2001). Importantly, participants showed no signs of being aware either of the activation of the goal or of its operation over time to guide their behavior. In the cooperation-goal study, for example, participants in the conscious-cooperation condition could accurately report on how cooperative they had just been; those in the nonconscious (primed) cooperation condition could not.

APPLICATIONS TO SPHERES OF SOCIAL LIFE

Close Relationships

Much recent work on the automaticity of social life has focused on close relationships. Because of the importance of the goals one typically pursues with close relationship partners (e.g., intimacy, belonging, achievement) and the high frequency of interacting with them, the significant others in one's life are likely to become external triggers of nonconscious goal pursuits. Across five studies, Fitzsimons and Bargh (2003) found that priming the representations of participants' close others (e.g., spouses, parents, colleagues) caused the participants to behave in line with the goals stored within those representations. People waiting at an airport were more likely to donate time to help the experimenter after being asked questions about their friends than they were after being asked about their coworkers; participants in a laboratory study who had earlier indicated having a goal to make their mother proud of them outperformed others on a subsequent verbal task, but only after subliminal priming of the representation of their mother.

Situational Features

Are there automatic influences on social behavior toward people one does not already know well? In general, it is the function of social norms to provide guidelines for how to behave towards strangers and new acquaintances. One is generally expected to act in a mildly

positive manner toward strangers, to not harm them, and to assist them to the extent they truly need help and one has the ability to help.

Routine settings and situations also have particularized norms for conduct that are automatically activated when one enters those settings. In harmony with the hypothesis that the mental representation of “library” contains within it action components that automatically guide appropriate action in that setting, Aarts and Dijksterhuis (2003) found that showing participants a picture of a library and instructing them to go to the library after the experimental session caused them to speak more softly during the experiment, compared to control participants.

Social Structure (Power)

Sociostructural variables, such as where one fits in the organizational or power hierarchy of a group, can also have implicit, automatic effects on thought and behavior. Generally, the non-conscious activation of the concept of power seems to produce greater concern with one's own goals and less concern with the outcomes of others, consistent with the traditional lore that “power corrupts.” Fortunately, not everyone has such self-centered automatic goals when in positions of power. Chen, Lee-Chai, and Bargh (2001) showed that there are those who instead automatically pursue the goal of helping and advancing the outcomes of those in their charge. Across several experiments, Chen et al. (2001) found that when these communally-oriented people (as determined by their responses to an initial questionnaire taken some months before the experimental session) were primed with power-related stimuli, they became *less* selfish than usual and more concerned with the outcomes of other participants, compared to a control condition.

(NONCONSCIOUSLY) MOTIVATED COGNITION

One burgeoning area of research involving automatic social phenomena is *motivated cognition*—especially self-protective motives. Spencer, Fein, Wolfe, Fong, and Dunn (1998) demonstrated that threatening participants' self-esteem (through false task-failure feedback) automatically caused an increase in their tendency to stereotype others. Apparently (and depressingly), the denigration of others appears to be an automatic and reflexive response to personal failures and threats to one's self-esteem.

But there are grounds for hope. Moskowitz, Gollwitzer, Wasel, and Schaal (1999) showed that automatic stereotype influences can be effectively countered if the individual possesses an automatic goal to be egalitarian and fair toward others. However, egalitarian participants did, however, show the same evidence of stereotype activation as did the other participants. Apparently, then, the stimulus of a minority-group member automatically started two processes at the same time: the activation of the stereotype and the activation of the egalitarian motive, with the latter functioning to shut down or inhibit the former before it could influence judgments. Moskowitz et al. (1999) have thus identified a positive form of automatic motivated cognition and shown how it is possible for chronically good intentions to prevail.

BENEFITS OF NONCONSCIOUS SELF-REGULATION

From Freud onward, scholars of successful adaptation and self-regulation have regarded nonconscious phenomena as mainly problematic—sources of negative outcomes (e.g., psychopathology, bad habits) and certainly not a help to adaptive functioning. However, recent theoretical analyses of intuition have emphasized the importance of immediate, automatic influences on choices and decision making. These have been touted as the mechanisms underlying the “gut feelings” or “hunches” that, far from being random or

illusory, do a fairly good job of directing us (see Dijksterhuis & Nordgren, in press; Lieberman, 2000).

In general, the nonconscious nature of these judgment- and behavior-guiding processes makes them a boon to effective self-regulation, because of their immediacy, efficiency, and reliability. It would seem to make good sense for as much guidance of current behavior to occur outside those conscious limits as possible.

CONCLUSIONS AND FUTURE DIRECTIONS

The automatic influences on social life are many and diverse. Other people, their characteristic features, the groups they belong to, the social roles they fill, and whether or not one has a close relationship with them have all been found to be automatic triggers of important psychological and behavioral processes. So too have features of standard situations, which become automatically associated with general norms and rules of conduct, as well as with one's own personal goals when in those situations.

One new line of research concerns how specific emotions such as anger, guilt, and happiness prime (i.e., nonconsciously influence) judgments and behavior (e.g., Lerner, Small, & Loewenstein, 2004). Most people are aware of the powerful influences that emotions can have over immediate behavior and judgments but remain unaware that these influences can carry over into unrelated contexts in which decisions and behavioral choices are made. Indeed, most priming studies depend on the fact that mental representations activated in one context take time to return to a deactivated state and are more likely to have an influence while active than they are at other times. The carryover effects of recent emotional experiences are likely to prove a common source of automatic influences in everyday life.

Research programs are moving beyond first-generation questions of whether nonconscious influences exist and what forms they might take to second-generation questions of how priming operates in the stimulus-rich real world. For instance, laboratory research has shown that a given priming stimulus can provoke, in parallel, a variety of immediate automatic responses (e.g., in perception, in motivation). But in unconstrained real world settings, people are bombarded with thousands of such stimuli every day, from advertisements to items in store windows to individuals one passes while walking down a busy street. Which of these will exert nonconscious influences, and which will not?

Another direction for research is determining how the various kinds of automatic effects interact with each other. The responses suggested by nonconscious influences may be in conflict with each other, such that one cannot possibly act on every preconsciously generated behavioral impulse. Models of how these conflicts are resolved, utilizing both nonconscious and conscious means, are now beginning to enter the literature (e.g., Morsella's PRISM model; Morsella, 2005); further research on how these parallel potentialities are transformed into one-at-a-time responses by individuals is urgently needed.

Finally, the recent discovery of *mirror neurons* (e.g., Rizzolatti, Fogassi, & Gallese, 2001), and what they have revealed about the hard-wired nature of the perception-behavior link in humans, is a tremendously important development in the history of psychology. These neurons, located in the premotor cortex of higher primates, have the intriguing property of becoming active both when a person watches an action being performed and when the person performs that action him- or herself. Social cognitive neuroscience research has already shown just how deeply and fundamentally—dare we say, automatically—our minds are connected to each other and to the larger social world.

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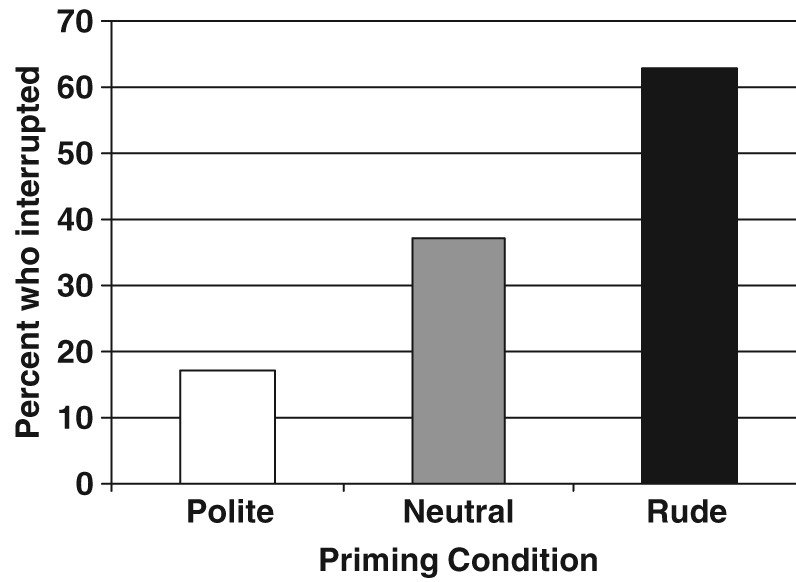


Fig. 1. Percentage of participants primed with the concept “polite,” the concept “rude,” or a neutral concept who interrupted a conversation between the experimenter and a confederate (Bargh, Chen, & Burrows, 1996, Experiment 1). From “Automaticity of Social Behavior: Direct Effects of Trait Construct and Stereotype Priming on Action,” by J.A. Bargh, M. Chen, & L. Burrows, 1996, *Journal of Personality and Social Psychology*, 71, page 235. Copyright 1996 American Psychological Association. Reprinted with permission.