

Chapter 4

Social Cognition

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How much do you think about that special someone—compared to your letter carrier? How much do you think about your advisor or your boss, compared to how much they think about you? The more we need other people, the more we need to make sense of them. This helps us to figure out how to relate to them. Social cognition describes this understanding process that allows us to act in our social world. Formally, social cognition is people making sense of other people and themselves (Fiske & Taylor, 2017).

Social cognition is at the micro end of social psychology. This book's chapters ascend from the individual lost in thought, to that person relating to one other person, to people relating with others in progressively larger groups. In this way, social cognition is a foundation of sociality. That is, our core social motive is a desire for belonging with others (Baumeister & Leary, 1995). The reason you obsess about your boss and your crush is that you want to belong with them (in different ways, of course). Belonging requires, first, that you try to engage in social cognition: understanding them, in the hope of predicting and maybe controlling what happens. Social cognition also has a more affective side, as it aims to help people feel better about themselves (or at least to find ways to improve) and to feel trust in others (if they deserve it). That is, you are likely to keep your self-esteem intact by being optimistic about your chances at work and at romance, as well as trusting the boss and the crush both to be basically good people (until proven otherwise). These core social motives (belonging, understanding, controlling, enhancing self, and trusting others; Fiske, 2014) drive social cognition and, with it, the rest of our sociality.

Our business here is describing how individuals understand their social world in order to navigate it. We start by identifying some principles of social cognition. People make sense of bosses and crushes (and everyone else) by following these general principles:

1. flexibly using both *automatic and deliberate* processes,
2. pragmatically *attending* to cues that seem diagnostic, and
3. representing apparently useful information in *memory*.

Then, three processes exemplify social cognition:

- 1. how people get inside the heads of other people, via amateur *mind-reading* (often called attribution theory or theory of mind);
- 2. how people *categorize* each other, often triggering stereotypes; and
- 3. how cognition generates *feelings and behavior*.

Along the way, we'll see how well you understand your crush or your boss—and how they most likely understand you.

Keep in mind that another human offers an incredibly challenging stimulus for forming a coherent impression. Other people are way more complex than objects. For example, people are autonomous agents with predispositions that are only indirectly observable: That is, they have intentions, other internal states (e.g., emotions), and enduring traits (e.g., personalities)—more than most furniture does. What's more, while you are perceiving other people, they are perceiving you back, and they may adjust accordingly, so they often are more variable and certainly more strategic than objects are (except for my laptop, who regularly conspires to manipulate me). We can know others with only indeterminate accuracy, given their intrinsic complexity. When thinking about your crush—or your boss—you want to know what they intend, how they feel, as well as what kind of person they are. This becomes more difficult if they know you are trying to figure them out, leading to some potentially awkward moments as you each try to manage each other's impressions. All this makes it amazing that we ever manage to form good-enough, clear-enough impressions of each other. But people matter to us—or at least some do—so they require explanation.

People Flexibly Use Both Automatic and Deliberate Processes

Perceivers are no fools. We know we cannot devote our full cognitive resources to each passerby, each complicated human, in the midst of our busy lives. Fortunately, people practice person perception, early and often, from infancy onward, so much of it becomes automatic. This automaticity saves time and effort in everyday encounters. Yet, we are flexible, so when the situation demands it, we can think more slowly and deliberately about someone puzzling or particularly important (e.g., the boss, the crush).

Automatic processing reflects people's shortcut strategies. People as *cognitive misers* (Fiske & Taylor, 2017) prioritize cognitive efficiency over accuracy, using effort-saving devices such as well-practiced procedures and familiar categories. But people also know when to change gears and devote more cognitive capacity. Thus, a more complete picture views people as *motivated tacticians* who know when to think hard and when to punt. At least three dozen theories of dual processes reflect this automatic-controlled distinction, especially in social cognition and attitude change (Chaiken & Trope, 1999) but also in popular culture as thinking fast and slow (Kahneman, 2011). We describe them here as a continuum, not a dichotomy (see Figure 4.1).

Operating on Automatic

Fully *automatic* processes are unintentional, uncontrollable, efficient, autonomous, unconscious, goal-independent, purely stimulus-driven, and fast (Bargh, 1997; Moors & De Houwer, 2006). Nonsocial examples include startling to a loud noise or dropping a hot object. Everyday social examples might include noticing when someone special or simply peculiar walks into class; a glance seems obligatory. Research illustrates a continuum from the fully automatic (most of the defining characteristics), to more conditionally automatic (only a few), to various controlled processes.

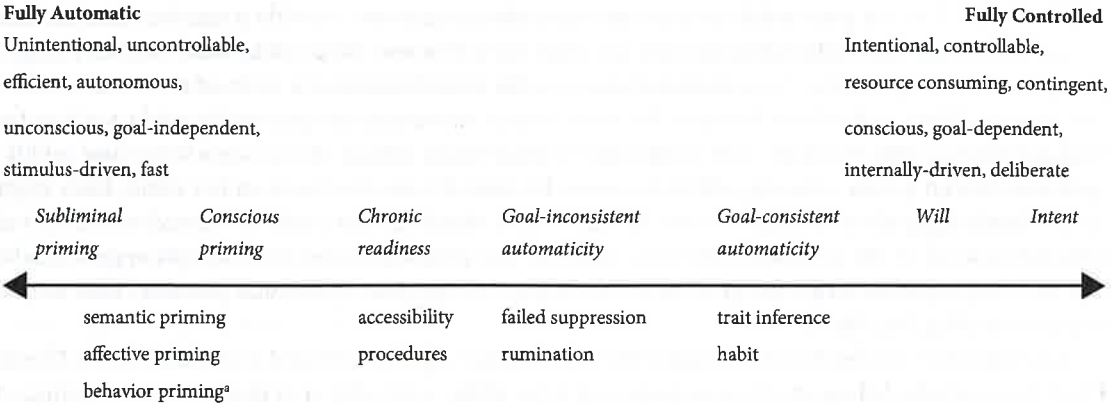


FIGURE 4.1. The motivated tactician's continuum: from automatic to controlled processes. *These three types of priming can operate either more subliminally or more consciously; semantic and affective priming are more reliably established than is behavioral priming.

Subliminal Priming

Long a debated topic, unconsciously cued associations comprise three types, only one of which is controversial. Unconscious cognitive and affective priming are fundamental processes; behavioral priming is under debate. Almost no one doubts semantic (cognitive) priming at an unconscious level: Present a word rapidly, followed by a mask (e.g., scrambled letters), so that participants cannot report seeing it. Then observe speeded response to identify a related word (Nosek, Hawkins, & Frazier, 2012; Payne, 2012). Likewise, an affect-laden stimulus (e.g., smiley face)—even presented subliminally—can prime compatible evaluations of an ambiguous subsequent stimulus (e.g., a foreign word). In a more social vein, one study suggests that subliminally priming the department chair's scowling face (i.e., their boss) caused graduate students to devalue their research ideas (Baldwin, Carrell, & Lopez, 1990).

More complicated are subliminal words or images priming behavior (for a popular-press summary, see Bargh, 2017; for commentary, see Cesario, 2014; Doyen et al., 2012). For example, priming White students with pictures of African American men made them respond more hostilely when provoked (Bargh, Chen, & Burrows, 1996), but the effect is delicate and difficult to replicate. Although the jury may still be out on behavioral priming, the evidence is clearer on subliminal semantic and affective priming.

Conscious Priming

One of the bedrock results in cognitive psychology, conscious priming of related semantic content is well established and replicates with social concepts. For instance, many intergroup bias studies show that group labels prime stereotypic associations (see categorization section in this chapter and Chapter 12). Several attitude measures also rely on conscious evaluative priming (see Chapter 6). Deliberately thinking of good experiences with previous bosses might prime optimistic expectations about a current one.

Chronic Readiness

Priming depends on situations that activate a concept. Another source of activation is habitual; chronic activation depends on individual people's distinctive experiences. Moving from contextual primes (experimental manipulations) to personal predispositions (individual differences in readiness), two examples illustrate. First, people tend to have different social concepts chronically primed (Higgins, 1996). Suppose

you often have love on your mind, because you have always been an incurable romantic. Also, it's been a while since your last relationship, and you are ready for a new one. Meanwhile, from another perspective, your crush might always have trustworthiness on the mind, because of a series of unfortunate earlier experiences. When each of you interpret the same chance encounter, you personally might see it as fate bringing you together, but your crush might worry about being stalked. At the same time, your middle-aged boss has no patience for any of this nonsense because she has deadlines on her mind. Each might inadvertently apply these concepts to you in the current situation. You could be viewed as a stalker or a slacker, instead of the irresistible romantic prospect you imagine. Accessible concepts appear quickly and early in people's descriptions of self and others; they are the lens a particular perceiver uses to filter impressions (Higgins, 1996).

Concepts become chronically accessible through practice, a process termed proceduralization (Smith, 1994). For example, beleaguered bosses judge employee ability every day, so it likely becomes routinized. Each person's own habitual dimensions of judgment proceed faster, with higher priority, more consistency, and greater efficiency. People may or may not be aware that they overuse certain dimensions, but once set in motion, a procedure has several characteristics of automaticity. Nevertheless, because perceivers could with effort employ a different dimension—you could judge trustworthiness or ability—procedural processes are not fully automatic; they border on controlled ones (see Figure 4.1).

Operating under Control

Moving toward the other end of the continuum (Figure 4.1): Controlled processes come in degrees, just as automatic ones do. A fully controlled process would have all characteristics opposite to fully automatic ones; complete control includes being intentional, controllable, resource consuming, contingent, conscious, goal-dependent, internally driven, and deliberate. But let's start with the hybrid cases in the middle of the automatic-to-controlled continuum and work our way to the purely controlled endpoint.

Goal-Inconsistent Automaticity

In the middle of the continuum, automaticity may beat control. Control fails when, despite the best goals, automatic thought patterns persist. One example is failed thought suppression. Trying not to think about an unrequited crush may work briefly while you monitor your thoughts, but as soon as you relax, your mind automatically wanders back to the one you love in vain. After attempted suppression, the forbidden thoughts surge in frequency: a rebound effect (Wegner, 1994). Ironically, monitoring to check whether one is having the banned thoughts instead keeps them active.

Persistent unwanted thoughts often take the form of rumination—repetitive, counterproductive thinking (Martin & Tesser, 1989)—as in obsession with a special someone who is not reciprocally obsessed with you. Or an unpredictable boss may provoke subordinates to unconstructive speculation about what the boss might do next. Simply having a goal (predict the crush's or the boss's next move) can backfire, leaving the perceiver in the grip of automaticity (in this case, being cognitively stuck in repetitious thinking).

Goal-Driven Automaticity

Relatively controlled processes tend to involve a goal, which mentally represents a desired end state (Aarts, 2012). Conscious choice frequently sets in motion simple automatic processes. Suppose you have lost track of the time over coffee with your crush, and you must contact your boss (goal). On deliberating, you decide to text instead of phoning, typing the text (process) is then automatic. In social cognition, goals often trigger more complex automatic processes. For example, the deliberate goal of forming an impression

encourages (relatively automatic) spontaneous trait inferences from the person's behavior (your crush buying coffee for you implies generosity; Uleman, 1999). Instant trait judgments are useful deductions from evidence to general patterns that predict the other person; automatic predictions may allow control over one's outcomes in the interactions.

Not just cognition varies in automaticity. Clearly behavior can be relatively automatic: Sometimes people allow habit to guide their actions. Habits—frequently repeated behavior (Wood, Quinn, & Kashy, 2002)—can help or hinder one's conscious goals. Letting automatic processes dominate controlled ones is an advantage only when the automatic behaviors are consistent with conscious goals (e.g., commuting to work in the usual way; Aarts & Dijksterhuis, 2000). But habits may undermine goals when they are inconsistent (e.g., reflexively biking toward work when you intended to meet your crush for lunch).

Intent

If people only sometimes follow their intent, how do the cognitive features of intent explain when might they succeed or fail? Intent matters because it predicts behavior and holds people responsible. Social psychologists, lawyers, and lay people agree on intent's essentials: choice, attention, and effort (Fiske, 1989). When your crush (or your boss) misses a lunch date, their intent matters. Intent presupposes the person has a choice (e.g., no transportation breakdowns). If they had a choice to show up or not, you then want to know whether they paid attention to try to make the meet-up happen (e.g., forgetting is not a good sign). Suppose also that your lunch date made the hard choice to stand you up, by overriding their normal lunch routine; that suggests even more clearly an intent to avoid you. So you consider your lunch date's degree of choice, attention, and effort in trying to meet up, to decide whether they no-showed intentionally or not.

The intended harm would hurt more than an accidental or uncontrollable one. More broadly, observers use intent to judge not only responsibility but also the degree of damage. Suppose your friend is interning at a nursing home. If he mixed-up the medications by accident, that could cause considerable harm. But if he did it on purpose, as a misguided prank, you and other observers would estimate the objective medical costs as higher. Various scenarios, all with intentional and unintentional harms replicate: Observers asked to judge actual damages inflated their estimates when a person did it on purpose, even if the victims don't know this. Intentional harms seem worse, even when they are not (Ames & Fiske, 2013a). The point is that intent matters so much to perceivers that we see the harms as intrinsically worse when intended.

Will

Relatively controlled processes tend to involve a goal, which mentally represents a desired end state (Aarts, 2012). As part of enacting a goal, conscious will—a thought that precedes, fits, and explains an action—would seem a prime example of intent and, in the default case, will likely does reflect intent. Nevertheless, two contrarian views challenge this common-sense assumption.

First, people may exercise their will less often than they think because many goals arise automatically. When situations trigger goals—a dark, plush restaurant makes a working dinner seem romantic—"automotives" may kick in (Bargh, 1999). The conscious will (working over dinner) may sometimes be less relevant than stimulus-response processes (romantic associations). Many a tragic misunderstanding has resulted this way.

Another contrarian view likewise argues that conscious will can be illusory (Wegner, 2003). If people thought about an action before acting, they infer that the thought caused the action. But what if both resulted from the same random cause? In that case, the thought did not actually cause the action. For example, an experiment first induced participants to think ill of a confederate. Then they were made to stick pins in a doll supposedly representing the obnoxious confederate; later, they felt they had magically caused

the confederate's headache (Pronin, Wegner, McCarthy, & Rodriguez, 2006). With equally illusory control, how many of us have "willed" our team to win?

Consciousness

Regarding what might seem the most deliberate of mental processes, consciousness entails being awake and aware, subjectively describing one's surroundings and experiences, as well as meta-cognition, such as noticing that one is daydreaming—but not necessarily controlling it (Winkielman & Schooler, 2012). Researchers document the contents of people's consciousness in daily life by experience-sampling methods that send queries at random moments or in the lab by requesting them to think aloud as they perform a task. Spontaneous thoughts often describe the current surroundings, drift toward dilemmas (unfinished business, current concerns), and frequently reflect one's social relationships.

A further clue to what consciously preoccupies us: Activations in the brain's default (resting) network overlap with its social-cognition network (Lieberman, 2013), suggesting the priority of thinking about other people, arguably preparing to interact with them. In our running example, your conscious mind is preoccupied with current concerns about your crush, more than unfinished business at work, as you wait to meet up.

Motives Control Dual-Mode Processes

To some extent, the motivated tactician chooses along this continuum of more automatic or controlled processes, as if they serve as social cognitive tactics, depending on current motives. Motivations shape people's tendency either to rely on automatic processes to make sense of each other efficiently or to engage more deeply in controlled processes. Most of these core social motives cut both ways, encouraging automatic or controlled processes under different circumstances.

For example, the need to belong (introduced earlier; Baumeister & Leary, 1995) can make people think deeply about their own ingroup and superficially about the outgroup. Because you want to belong with the ingroup (and not the outgroup), ingroupers are more motivationally relevant. That outcome dependence drives your attention to them. Wanting to belong with a particular person or group may motivate much thinking but also bias that thinking in wishful, optimistic directions (see Fiske & Taylor, 2017, Ch. 2, for references). For example, participants hoping to meet dating partners evaluated two videos of eligible peers making a pitch for an ideal restaurant. One pitch was good; the other was not. And one peer was available to meet-up; the other was not. Participants could distinguish the unavailable peer's good performance from the bad one. Objectivity went out the window for the available peer's video: Participants thought the inferior performance was just fine (Goodwin, Fiske, Rosen, & Rosenthal, 2002). Thinking more deliberately about your crush will not necessarily make you more accurate because your cognition is motivated toward affiliation (belonging).

Motives to understand and to control one's outcomes can make people want to reach a decision, any decision. These knowledge-oriented motives make people want to feel a sense of accuracy, so they may think harder but not necessarily better. In a series of studies, participants' outcomes (a cash prize) either depended on teamwork with a partner or was independent of the partner. This task-oriented outcome dependency motivated participants' cognitive processes aimed at understanding (attention to the most informative, surprising information about the partner; Erber & Fiske, 1984). They also made dispositional inferences, which would increase their sense of being able to predict the partner; they even used the mind-reading regions of the brain (Ames & Fiske, 2013b). But their impressions were not necessarily accurate;

everyone drew their own conclusions (Ruscher & Fiske, 1990). Interpreting your boss's behavior may provide a sense of prediction and control without being accurate. Knowledge-oriented motives also cut both ways.

Affect-driven motives to feel better about self and others particularly put accuracy at risk. But this may not be a bad thing (Taylor, 1989). Positive illusions about how much others like and respect you may ensure a degree of self-esteem, and positive illusions about close others' good qualities may build trust. Being optimistic about yourself and your crush may (within limits) facilitate the relationship. A bit of benign bias can grease the social wheels more than brutal accuracy.

Section Summary

People use a variety of more automatic and more controlled processes to form impressions, depending on the situation and on their motives. The motivated tactician must balance costly deliberations that offer a sense of accuracy against the efficiency of shortcuts that often yield good-enough impressions for everyday use. People think harder mainly when the stakes are raised, as when thinking about the crush or the boss.

People Pragmatically Attend to Cues that Seem Diagnostic

Social attention is a precious cognitive resource. In the midst of an ongoing interaction, the motivated tactician must choose whom to notice, where to fix attention, and what to consider. To learn more about your crush over lunch, you certainly should pay attention to not only that person's conversation but also nonverbal behavior (gaze, facial expression, seating distance).

Choosing to attend to your crush's face instead of your phone is selective attention; it allows you to take in (encode) information. As the next sections show, research on social attention has documented some principles of selectivity: the intrinsic attentional appeal of faces (mutual crushes gaze into each other's eyes), attention to cues that are salient by virtue of being informative in context (your crush is the only one who laughs at your jokes), and attention to cues that are accessible by virtue of being useful in the past (your crush visibly enjoys the same music as you).

When you relive the encounter later, you replay some parts more than others. Even the isolated social cognizer lost in thought about another person devotes attention to some knowledge more than others. Attention reflects the two processes, selective encoding in real time and internal activation in consciousness (Chun, Golumb, & Turk-Browne, 2011). Consciousness is often occupied by unfinished business, whether from romance or work, thoughts activated in the hope of knowing what to do.

In reaction to the seeming power of consciousness (thinking is for doing) is a contrarian view: Maybe conscious attention is irrelevant, and maybe social perception is direct from environment to action, without cognitive mediation. But first, let's look at some noncontroversial principles.

Faces Capture Attention

People attend to each other's faces to extract information about the other's gaze (indicating focus of attention), configuration of features (facilitating recognition), and apparent traits (assembling an impression).

Gaze

Attention indicates intention, as noted earlier. Perceivers rightly discern another's gaze—attentional focus—as a clue to what the other might do next. People look where others look because their attention suggests their intention. Gaze-following occurs even when humans look where a cartoon animal is looking (Quadflieg, Mason, & Macrae, 2004). Joint attention reflects sociality (Happé, Cook, & Bird, 2017). People direct attention to coordinate joint activities (both looking into the camera for a selfie) and to bond over their joint focus (as when both check the result).

Eye contact often initiates interaction. Social gaze is especially informative when it concerns us personally. If another face is gazing at you, then presumably you are the target of their attention and perhaps intention. This is so ingrained that it generalizes to still photos. All else equal, people prefer photos with a direct gaze (Mason, Tatkov, & Macrae, 2005). A direct gaze is not only appealing but it also speeds categorization of the face (e.g., by gender), eases associated inferences (e.g., stereotypes), and facilitates memory (Hood, Macrae, Cole-Davies, & Dias, 2003; Macrae, Hood, Hill, Rowe, & Mason, 2002).

Features

Suppose you are unabashedly looking at your crush. Face perception encodes both fixed features and changeable expressions, as well as prior knowledge about the person, implicating distinct brain areas (Haxby, Hoffman, & Gobbini, 2000). People are experts at recognizing another's face, and the process is global and holistic, not piecemeal, feature-by-feature (Macrae & Lewis, 2002). People rapidly encode, first, that the stimulus is a face, then its category (gender, age, race), then individual identity, and finally attractiveness or other inferences.

Sometimes one face will present a visual configuration that resembles other naturally occurring face configurations. For example, people infer that a baby-faced adult is innocent and trustworthy, like a baby (Zebrowitz et al., 2012). The baby-faced adult seems to afford (offer opportunities for) caretaking. Similarly, masculine faces look more dominant to people than submissive faces do, as we shall see next. Such fixed features trigger instant impressions.

Trait Inferences

People infer people's personalities from their facial structure (Todorov, 2012), a strategy shown to be unreliable more than a century ago. Nevertheless, people do it. The fastest trait that judges infer is trustworthiness: Happy-looking faces seem trustworthy, and angry-looking faces seem untrustworthy. For example, furrowed brows make anyone look angry, but as a fixed facial feature, they make a person look untrustworthy (Todorov, Said, Engell, & Oosterhof, 2008).

The second fastest dimension overgeneralizes features of age/gender/strength to imply competence (dominance/maturity). Both gender and racially fixed facial features that resemble emotions overgeneralize to personality traits (female faces looked surprised and therefore open; Zebrowitz, Kikuchi, & Fellous, 2010). Face-based inferences of competence predict which politicians get elected (Todorov, Mandisodza, Goren, & Hall, 2005), and face-based inferences of criminality predict which people get incarcerated or executed (Blair, Judd, & Chapleau, 2004; Eberhardt, Davies, Purdie-Vaughns, & Johnson, 2006). Faces can launch a thousand slip-ups.

Salience in the Environment

Few stimuli are as socially attention-grabbing as faces. However, almost any stimulus can be salient in context (see Fiske & Taylor, 2017, Chapter 3). The sheer juxtaposition of a stimulus to context—an immediate situation, long-term expectations, or instructions—easily directs attention. For example, in the immediate context, visual novelty attracts attention (e.g., the only older person in a roomful of young people or someone wearing a black sweater among orange ones; McArthur & Post, 1977). Being perceptually figural does too: Bright, moving, and complex stimuli are salient relative to duller, stiller, simpler ones. One can also be figural by physical location, being front-and-center, dominating the perceiver's visual field (Taylor & Fiske, 1975). Students know this, sometimes choosing their classroom seats to attract or avoid faculty attention.

Long-term context likewise determines salience over time: as novelty, relative to expectations, general or specific. A person can be or behave in ways unusual (unexpected) for people in general. For example, being an outlier on height or helpfulness attracts attention. So too does negative behavior, because (all else equal) people expect moderately positive behavior from others, so negative behavior attracts attention. A person can also behave in ways unusual for that person's social group; counter-stereotypic information captures attention. Moreover, one can behave in ways unusual for oneself, which leaves friends and colleagues puzzling.

Finally, people can be salient by virtue of being goal-relevant. That special someone attracts attention because of one's desire to affiliate. The boss attracts attention because one hopes to advance on the job. Eager employees make sure their bosses notice them in return. Outcome dependency attracts attention to the people who control our fate. Simple instructions also can direct attention in more mundane ways, as when one watches the safety video because of the boss's instructions.

Whatever its origin, salience affects judgments in various ways that make little logical sense (Taylor & Fiske, 1975). Visual salience makes people loom larger: Salient people seem to cause events (even when they don't). So the solo older student in a roomful of younger students seems more impactful than everyone else (the same would be true for the only youth in a roomful of elders). By seeming more influential, salient people also garner more polarized evaluations; praiseworthy behavior seems especially laudable, and blameworthy behavior seems especially egregious. Salience exaggerates judgments in whatever direction they would otherwise tend.

Part of the process involved is this: Attracting attention makes perceivers think about a target person. All else being equal, this scrutiny makes the overall impression more coherent than it would be otherwise, as thinking makes all the pieces fit; people expect another person's personality to be coherent. Remember that the cognitive miser defaults to the simplest impression that will do for present purposes. Waiting in the wings, however, the motivated tactician may decide that more thought is needed, for example, under outcome dependency. Then, scrutiny reveals inconsistencies that need to be resolved if one aims to predict and control one's outcomes—say, with a boss.

In the default case of no outcome dependency, the superficial coherence doubtless encourages more extreme, confident judgments and attributed influence. Arguably, perceivers are not wrong to notice and consider people who are unusual—because novelty may be diagnostic—as when that older student wants to mix outside their own age-mates. But novelty could also be random: Salience is not necessarily logically relevant, in proportion to its social cognitive consequences. Should you strive to capture your boss's or crush's attention? It depends on what kind of first impression you can produce, because salience will exaggerate it, in either direction.

Accessibility in the Mind

As just described, external salience captures attention; salience affects the selective part of attention, noted earlier. The other part of attention is what is currently activated in mind; accessibility is internal attention. Accessibility describes the ease with which stored knowledge comes to mind. Recall that earlier sections introduced two fixedly automatic forms of mental accessibility: In one, the environment determines relatively automatic subliminal priming, outside the perceiver's control (a movie primes snacks without thinking because of relentless advertising). In the other fixed form, chronic accessibility is based on individually well-practiced judgments, which become an individual difference in automaticity (some people learn the snacks' calorie counts). Here, we consider a third form, a more changeable conscious accessibility; this is a short-term function of the frequency and recency of a concept's activation (someone nags you often or nagged you just now about healthy eating). Other conscious, short-term situational primes illustrate accessibility.

At one extreme are rich primes, such as asking participants to write about a time they felt powerful (e.g., Galinsky, Magee, Inesi, & Gruenfeld, 2006). This manipulation primes power and makes people act that way. At the simpler extreme are bare-bones primes, such as when experimental participants read a series of positive or negative trait adjectives. For example, priming "adventurous" suggests a daring interpretation of solo-sailing across the Atlantic but priming "reckless" suggests it might be foolish (Higgins, Rholes, & Jones, 1977). Notice that the primes shape not just a positive-negative evaluation but also a specific meaning, so the priming effects are likely to be stronger than simply positive ("good") or negative ("bad") primes. Regardless, to prime meaning as well as valence has the most effect on subsequent judgment. Other frequent primes include social group labels ("Black," "White") or pronouns for "us" and "them" (Devine, 1989; Dovidio, Evans, & Tyler, 1986; Gaertner & McLaughlin, 1983). These too can prime meaning as well as valence.

Primes are more powerful under specific conditions, which explain how they work (e.g., Srull & Wyer, 1979): Primes are stronger when they can affect encoding, that is, by shaping the initial interpretation of behavior (e.g., as adventurous instead of reckless). Therefore, primes are strong also when the prime precedes the stimulus, rather than vice versa; if the prime is already in mind, the prime can shape the meaning of the stimulus more easily than if it has to do so after the stimulus is already encoded. Likewise, when the prime and stimulus are contiguous, rather than farther apart, the prime has more influence. Finally, when the rating is delayed, this allows the primed interpretation to beat memory for the original stimulus. So, if you want your boss (or your crush, for that matter) to interpret your long silences as deep thinking instead of mind-wandering, it's best to plant the "wisdom" idea immediately before any potential lapses ("My family always weighed their words and wasted none").

Not only traits can prime selective accessibility of relevant meanings: Accessibility research has primed social categories, such as race. Police and probation officers, first primed below awareness (subliminally) with "Black," then go on to rate a race-unspecified teenager as having more guilt, a worse personality, and more likelihood to reoffend, thereby justifying harsher punishment (Graham & Lowery, 2004). Just about any concept can prime interpretations of a relevant stimulus (for a stunning array, see research reviewed in Fiske & Taylor, 2017, Chapter 3). Because priming represents one interpretation of a stimulus, which then goes into memory, priming effects can be long-lived.

Yet, priming effects are not so simple. Described so far are accessibility effects reflecting assimilation—using the prime ("adventurous") to construct a compatible interpretation (skydiving is a thrill). Sometimes, the prime is so far-fetched that participants react to the misfit between prime ("safe") and stimulus ("skydiving"), so they judge by contrast (skydiving is dumb). Priming your boss with the name of your brilliant young advisor should more effectively assimilate that positive image to seeing you also as intelligent.

Priming your field's Nobel Awardees would probably make you look unimpressive because of the far-fetched comparison.

In conclusion, primes aid a lazy mind that's operating on automatic, in a default mode: When unmotivated perceivers notice similarities between a preconscious and abstract prime ("us"), that greatly overlaps with an ambiguous stimulus (your latest presentation on behalf of the team; Mussweiler, 2003). Contrast results in the opposite circumstances (when motivated perceivers, testing for differences, consciously encounter specific primes that overlap very little with an unambiguous stimulus—comparing the class valedictorian's record and your own transcript would create contrast, making you look bad). Whether assimilation or contrast, the plausible cognitive processes supports priming both relevant meaning and evaluations.

Direct Perception: What the Environment Affords

So far, this chapter on social cognition has presumed that cognition plays a leading role in automatic and controlled processes and in attentional processes such as priming. A contrarian perspective on attention rejects the role of cognition. In this view, thinking is irrelevant. Instead, proponents argue that the environment directly "affords" certain responses: Perception is direct and unmediated by the mind.

One strand of evidence is the already-described finding that people react to baby-faced adults as if they seem to afford caretaking. Actual babies do afford cuddling—more than an elephant or a porcupine does. The perceiver's body allows some responses to objects and beings in the environment. Watching a practiced and well-conditioned rock-climber gauge what to grab and where to step shows the fit between one body and one ecology, responses that would not be available to all of us.

Another illustration of direct perception emerges in current approaches to embodied cognition, sometimes called situated cognition (Semin, Garrido, & Palma, 2012). Gesture, posture, facial expressions, and other experiences of self in space can affect cognition. For example, it's hard to dislike someone if you are nodding, smiling, leaning forward, and looking into each other's eyes. Akin to direct-perception approaches, embodied cognition emphasizes both bottom-up perceptions and top-down frames (expectations). The experience of self-in-setting prepares for action afforded by the setting. Social interaction is crucially driven by the body-in-context. For two people, relative size, reciprocal posture, nonverbal imitation, and other enacted coordination reflect embodied cognition (Semin et al., 2012). Your crush's nonverbal reciprocity (e.g., leaning forward and smiling when you do) affords further interaction.

Finally, observers often agree in apparently direct perceptions of other people. Another line of work examines natural breakpoints in action sequences. Much like scenes in a video drama, spontaneous interactions naturally segment into scenes that observers reliably identify (Newtson, Hairfield, Bloomingdale, & Cutino, 1987). For example, if you watch your crush talking to an eligible stranger in a bar, it matters who spoke first. If it's your crush, you might reconsider their exclusive interest in you. The person initiating the conversation affords a causal perception—speaker and responder. Let's hope that it ends with one unit, but, if not, the give-and-take of ordinary interaction has recognizable units. Finer units emerge for unexpected activity, reflecting more information gain. As you notice the stranger point your crush toward the facilities, your interpretation adjusts accordingly, but only if you watched closely enough to notice.

All the direct-perception approaches usefully spotlight what a stimulus configuration can provide the adapted social animal. We now return to more conventional social cognition approaches.

People Represent Apparently Useful Information in Memory

Social memory research tracks theories in cognitive psychology and cognitive neuroscience, with a lag of several years. The borrowing systematically follows the original work, but with a twist: The resulting social cognitive models sometimes reveal what is distinctive about social memory. But, first, let's briefly overview the range of ideas about how people remember things about other people.

Associative Networks: Organizing Declarative Memory

Suppose you are trying to remember the name of your boss's partner or your crush's roommate, whom you've met only once, at a crowded party. "Skyler and . . . Skyler and . . .," you rehearse mentally, hoping to spring the association. Or you link the elusive person to the one conversation you all had: "I remember Skyler said they both love biking: I know Skyler's athletic." Yes, but what was that name of Skyler's associate?

Early views of social memory usually posited each target person as a node linked to traits, each in turn linked to relevant behaviors (e.g., Hastie, 1988; Srull & Wyer, 1989). Initial social memory models organized person memory into these node-link networks. Retrieving information required activation spreading along retrieval pathways. The more often the particular link is activated, the more likely it is to be activated again; the nodes' joint activation strengthens the pathway that determines retrieval. ("Skyler and . . . Skyler and . . .")

Let's rewind to when you met that one time and decided that Skyler's associate is friendly. Impressions can form online, as a perceiver encounters behavioral information and infers a personality trait from a consistent pattern of behavior (greeting with a smile, "I've heard so much about you," asking questions, joking). This behavior gets encoded as information residing in short-term memory (current attention); there, the incoming information links to memories about related information and the individual.

Suddenly, Skyler's pal makes a harsh judgment about another guest across the room. Whoa! If the information is inconsistent with a developing impression of friendliness, it stays longer, as the perceiver attempts to make sense of it (friendly and harsh?!). This may result in a memory advantage for inconsistent information, under some circumstances. Either way, the resulting associations enter long-term memory. (Except that darned name . . .)

Sometimes, impressions can form on the basis of information retrieved from memory, as you review your impression after the party. Memory-based impressions correlate with whatever is memorable (kind greeting but harsh judgment). But suppose you had already formed an impression: Your memory for the data might not match the impression. Online impressions do not correlate so much with memory because what determines impression weight (e.g., extraordinary friendliness) differs from what determines memorability (e.g., that inconsistent harshness, which, in the end, you dismissed as uncharacteristic).

This approximation of several person-memory network models (see Fiske & Taylor, 2017, Chapter 4) illustrates the flexibility of efficiently learning about someone, a process that requires short-term memory capacity to store content (declarative memory), establishing shared pathways between nodes, retrievable through automatic or controlled processes. ("Skyler and Chris!!")

Procedural Memory: Memory in Action

Declarative memory models, just illustrated, describe rapid encoding of content, such as other people's names, traits, and interests. Procedural memory focuses instead on learned sequences, such as repeating

a warm-up series before a workout. This slower-learning memory process requires practice on specific, focused routines, resulting in durable memory traces that eventually execute quickly and automatically. If certain conditions apply (workout clothes, warm-up mat, a free hour), then the procedure executes (child pose, then downward dog . . .). Current stimuli and goals trigger procedures through matching and selecting processes. As described earlier (Smith, 1998), procedural memory nicely explains the facilitation of routinized judgments (detecting your boss's moods).

Parallel Processes: Coordinating Memory

Our running illustration has the perceiver first gathering information and then storing it away, both in the service of thinking for doing. Generally viewing declarative memory as a serial process entails forming a sequence: encoding, memory, and response. Subsequent work developed simultaneous parallel process models of encoding and retrieval. Gone were the node-link networks of spreading activation (admittedly itself a parallel process). Broadly, parallel distributed processing models view encoding and responding both as emerging from the activated configuration. Smartphone photos of your crush might activate pixels variously representing different images by patterns of information (parallel, distributed, procedural processing). In contrast would be a series of sketches on paper, each representing only one image (serial, declarative memory).

The parallel distributed processing, applied to social encoding and memory, provides a useful way to represent simultaneous encoding of new information, balanced with prior knowledge, each reciprocally constraining interpretation of the other (e.g., Kunda & Thagard, 1996).

Social Memory Structures: Why Social Memory Matters

Some memory models more readily focus on abstract generalizations (e.g., expectations), while others emphasize specific inputs (e.g., nonverbals). Social cognition research has gravitated more toward the top-down representations, focusing on categories, concepts, and expectations—prior knowledge sometimes called schemas (Macrae & Bodenhausen, 2000). These theory-driven cognitive structures hypothetically represent knowledge about a concept's attributes and the relationships among them. Commonly studied categories include race, gender, occupation, and traits, on the assumption that people use these as shortcuts to make sense of each other. These categories certainly guide the getting-acquainted process.

To be sure, just because perceivers use generic representations, this does not mean that they never engage bottom-up, data-driven processes. For example, you may know that your boss belongs to a book club (category: bibliophile), but unless you learn of some specific titles (data), conversation will stall.

Categories often appear as fuzzy sets, a collection of exemplars loosely unified by family resemblance, centered around a prototype. Social category inclusion does not operate by rigid rules, but rather by overlapping attributes. That is, a bibliophile might read e-books or physical ones, literary fiction or modern history, and one book a month or 20. Loving books might prime a prototype of the ideal bibliophile: wearing glasses, tweed, comfortable shoes, and disheveled hair. Categories guide encoding, inference, and memory; they organize social knowledge but sometimes distort it to fit. For example, you may misremember the bibliophile as carrying a backpack because book-lovers often need a place to stow all those printed pages. Categories provide abstract, typical knowledge, automatically accessible and often stable.

People also store specific instances, which might embellish some aspects (tweed jacket with jeans) and omit others (no glasses). Exemplars besides your boss might include the school librarian, the owner of a

local bookstore, and your friend the English Lit major. Such collections of exemplars allow perceivers to answer novel questions (do bibliophiles mark up library books?), estimate variability of category members (what range of books per month?), and report feature correlations (are fiction readers more often female?). Both prototypes and exemplars help the social perceiver to navigate the buzzing, blooming social world.

Interim Summary of Principles

Motivated tacticians use either relatively automatic or more controlled processes to make sense of each other, depending on motives to belong, understand and control, enhance self-esteem or build trust. Perceivers attend not only to apparently diagnostic cues, especially faces, but also cues salient in context or accessible because of recent or frequent activation. Perception that reflects the situated person may link directly to action without substantial cognitive mediation. Memory too may be embodied, but more commonly studied memory processes involve associate networks of declarative knowledge and if-then procedures perhaps represented in parallel distributed processes. Social categories play a critical role in social cognition; the next sections describe categories for dispositions such as traits, categories for stereotyped social groups, and categories of social emotions and behavior.

Mind-Reading: Attribution and Theory of Mind

It's a miracle that people make sense of each other at all, for all the reasons mentioned earlier: People, compared with furniture, have intrinsic complexity, with hidden but crucial features that guide their action. To cope, social perceivers rely on generic prior knowledge about kinds of people in kinds of situations, though research has focused most on perceiving kinds of people. Thinking is for doing. To predict another's behavior, people often try to figure out the other person's underlying predispositions, such as personality traits and intentions. In the process, perceivers explain others' behavior in causal terms (seeking to know why they do what they do). This is what can keep you up at night, wondering about your unpredictable boss or your mysterious crush.

Enthusiastic Social Explanation

Attribution is the term for inferring a causal explanation for someone's actions. Just as psychological scientists try to explain behavior, so do regular people, making them common-sense psychologists (Heider, 1958). People believe some basic rules of causality in everyday settings (Taylor, 1982): Causes precede effects, close in time and place; causes seem plausible if they are salient, comparable in magnitude, and resemble the effect. In trying to explain your unexpectedly small bonus at work, plausible causes might involve an unfortunate just-prior incident (recent, prominent, significant) but not your history of forgetting to close your office door or clean-up your social media record (which seems habitual, trivial, background). Causal analysis often explores the other person's mind: knowledge, beliefs, mental state, attitudes, personality, desires, and intent (Ames & Mason, 2012). We take for granted this often-effortless mind-reading.

People's ability to imagine other minds is arguably how we manage to adapt as social beings (Hare, 2017). Theory of mind emerges when children realize that someone might act on beliefs that differ from their own. For example, in the false-belief paradigm, a child observes a story in which one character hides

candy while another character is out of the room. The child might know where candy is hidden but comes to realize that another child does not. Toddlers expect the other child to search what the perceiver knows to be the candy's actual location, but kindergarteners know that the other child will search where they believe it to be (e.g., Saxe, Carey, & Kanwisher, 2004). Becoming able to guess what's in someone else's mind is a learned ability.

Sometimes mind-readers are overenthusiastic; people perceive intent and feelings in objects, animals, and deities. Consider how often people talk to their cars, pets, and computers as if they were human. People anthropomorphize (treat nonhumans as if they were human) particularly when they have unmet needs for affiliation (everyone else has weekend plans; Epley, Waytz, & Cacioppo, 2007). People who have a big need to belong are especially sensitive to social cues (Pickett, Gardner, & Knowles, 2004). People also overattribute minds when they need to feel more socially effective (friends aren't responding to your messages). Anthropomorphism works best when plausible human-like cues are available (the cat is gazing at you).

Attributing mental states requires a fraction of a second (e.g., Willis & Todorov, 2006). Several stage models explain why, namely, that initially identifying, categorizing, and characterizing behavior intrinsically entails relating it to traits ("Paying for breakfast was a nice thing to do; she's generous"; Gilbert, 1998). Only afterwards, as a second step, do perceivers correct for situational influences ("It's going on a work account"). The dispositional attribution is relatively automatic and spontaneous, whereas the adjustment for context requires controlled deliberation.

Rational Attribution Ideals

One view of attribution portrays the ideal reasoning that a rational thinker would use to weight the evidence and deliberately choose an explanation. These deliberative models provide standards to evaluate the spontaneous attributions just described. In assessing the ideal case, they reveal how we fall short, the systematic errors and biases that emerge, by comparison.

Heider's Common-Sense Psychology

Heider listened to lay people explaining why other people do what they do, which provided insights into their amateur mind-reading processes. People demonstrably search for patterns of invariances, stability, and change. Understanding your boss's competence and plans requires that you notice patterns: If the boss consistently fires people just before the end of the fiscal year, inferring the boss's cost-cutting priorities is not hard. Chief among the useful patterns to watch are ones that reveal, first, the person's ability (capacity compared to environmental forces); that is, does the boss have authority to act on this priority, despite social pressures? Does the boss consistently show the ability to bring about this goal? Second, even if the boss has the ability to fire people, to balance the budget, does the boss have the motivation (intention and effort) to bring about the outcome? Is the boss seriously motivated (perhaps for fear of keeping the job)? Mind-reading depends on observing patterns of what people can do and try to do. Heider's original, rich, and nuanced writings inspired the next theories.

Jones's Correspondent Inference Theory

Building on Heider, this theory assumes the target person has both ability and knowledge about their behavior and its consequences; the boss can fire people, knowing the consequences for the individual and for the bottom line. Correspondent inference then describes how people extract dispositional evidence from behavior (Jones & Davis, 1965): In short, does that action reflect a corresponding intention

(and therefore a relevant attitude or trait). If external pressures can sufficiently explain the action, then perceivers should resist a dispositional inference. For instance, socially desirable behavior has a sufficient external explanation, so an internal one is unnecessary: A person who tells the truth is not necessarily of exceptional honesty. But lying is more informative because it runs against social norms. Likewise, a person who does what their role demands—a professor who professes—does not reveal any disposition distinct from external pressures. But a train conductor who professes must be distinctively knowledgeable.

Attributing intent follows from what is distinctive about the outcomes of an actor's behavior. Jones identified effects that are unique ("noncommon") as diagnostic of underlying intent: Choosing a series of jobs that differ in many respects but always involve living near trains suggests trains reflect the chooser's main intent. Heider's search for invariance (constants) emerges here. Knowing your boss's patterns (senior staff always go first) suggest that either cost-cutting or ageism is the primary intent, but retaining experience is not. This is a logical view.

However, humans are not so tidy. Despite emphasizing rational attribution processes, correspondent inference research soon revealed one minor bias and one robust bias. First, people make more dispositional inferences when the actor's behavior bears on the perceiver's own interests, especially if apparently directed on purpose. Your boss's behavior toward you ("didn't say hello") seems more informative ("uh oh!") than the same behavior toward someone else ("get over it").

Second, in a bigger and more persistent bias, perceivers overemphasize dispositional causes and underemphasize situational ones. For example, even when behavior is situationally constrained, observers show a correspondence bias (Gilbert & Malone, 1995). A student assigned to defend a controversial viewpoint for a class essay should not be inferred to have the corresponding attitude; the student had no choice. Perhaps the boss has no choice, either; the boss's own job may depend on eliminating other people's jobs. But we still attribute at least some intent toward the unpopular behavior in both cases. This dispositional bias (even constrained behavior corresponds to intent) foreshadows the lay perceiver's other departures from rational models.

Kelley's Covariation Model

Overlapping with correspondent inference theory, but more comprehensive and formal, Kelley (1972) posited that three sources of information determine the ideal analysis of causality. Suppose your boss critiques your suggestions in a meeting. How you interpret this depends on three answers: First, does this behavior target only you as the receiving entity, or does the boss do this to everyone? The object of the action, unique versus widespread, is its distinctiveness. Second, does everyone think your suggestions are hogwash, or just the boss does? The subject or origin of the action, individual versus general, shows its consensus. Third, does the boss inflict this criticism on you in this meeting and other venues, or just this one meeting? The stability of this behavior (in effect, its adverb) is its consistency.

The combination of low distinctiveness (the boss critiqued everyone that day), low consensus (no one else critiqued you), and high consistency (the boss is always doing this) suggests an abusive boss. On the other hand, critiques that are distinctive to you, a shared consensus, and delivered consistently across venues, suggests your work needs to improve. Either way, you might look for another job. Other combinations of cues would be less clear on causality.

Experimental manipulations of the three dimensions independently support the model (McArthur, 1972). However, evidence soon accumulated that consensus did not work as expected. Like Jones's correspondence bias, finding that anyone would do it (under similar circumstances) does not prevent perceivers from attributing action to the actor's distinct personality. Rational, ideal-thinker models begin to unravel at the edges.

Biases

As normative (idealized) models frayed, more descriptive approaches identified patterns of perceiver bias. First, the correspondence bias expanded into the fundamental attribution error (Ross, 1977), also observing that people exaggerate dispositional causes and underestimate situational ones. What's more, although observers do this, actors explaining their own behavior do the opposite, exaggerating situational causes (Jones & Nisbett, 1972) especially for negative events (Malle, 2006; "The dog ate my homework"). The dispositional bias holds more for Western cultures, who emphasize individual agency, but not always for Eastern cultures, who emphasize collective and contextual causes (e.g., Morris & Peng, 1994).

Second, perceivers fail to correct for their own perspectives in three ways: In a self-serving bias (Miller & Ross, 1975), people take credit for success more than failure (Arkin, Cooper, & Kolditz, 1980). In a self-centered bias, people each take more credit for their own contributions to joint work than the other person would assign (Ross & Sicoly, 1979). Ironically, people believe that they alone see reality as it is, while viewing most others as biased, a phenomenon termed naïve realism (Pronin, Gilovich, & Ross, 2004).

Third, people especially attribute blame for negative events (Shaver, 1985), and the worse the event, the more a specific person seems responsible (Burger, 1981). People do not like randomness. Instead, people prefer to believe that people get what they deserve. In a just world, victims who can't be helped are seen as deserving their hopeless fate—more than victims whose problems can be solved by charity (Lerner & Miller, 1978). People prefer not to think that bad things can happen to good people.

Section Summary

Attribution processes are a form of mind-reading, imagining another's mental state. People explain each other's behavior by attributing it to personal predispositions or situational factors, with marked dispositional biases (at least, in the West). The process is not fully rational; instead it is prone to systematic errors and biases.

Stereotyping: How People Categorize by Social Groups

Attributions essentially categorize people by personality traits, based on their behavior. As noted, in addition, people rapidly categorize faces by gender, race, and age—and infer dispositions accordingly. Categorization goes beyond specific behavior and facial cues to the whole person. And that's not all. Categorization reflects a host of other social distinctions: social class, sexual orientation, occupation, and religion. A later chapter addresses intergroup relations more thoroughly; here we address some cognitive features of group categorization, namely, its automaticity, ambiguity, and ambivalence. Together, these features explain why category-based stereotypes often go unexamined, under the mind's radar.

Automatic Categories

Lay people underestimate how difficult it is to be color-blind. People cannot help noticing each other's social categories, especially visual ones such as gender, ethnicity, age, and perhaps class. Besides evidence from instantaneous face perception, neural indicators show immediate electro-cortical responses to gender and race (e.g., Ito & Urland, 2003). Social groups even act as positive and negative primes to

identify subsequent words (Fazio & Olson, 2003). That is, recall how positive and negative adjectives (adventurous, reckless) shape interpretations of relevant behavior (skydiving) because they make its positive or negative aspects salient. In the same way, minority group labels can prime negative stereotypic interpretations of ambiguous behavior because the culture associates, for example, being Black with being criminal (Devine, 1989). Implicit associations spontaneously link between group labels and stereotypes (Banaji & Greenwald, 2016). Social group primes facilitate stereotype-relevant lexical decisions (word/nonword perceptions). Showing White participants photographs of Black faces and White faces speeds up their recognition of (even irrelevant) negative and positive words, respectively, because the category makes its valence (positivity/negativity) more accessible (Fazio, Jackson, Dunton, & Williams, 1995).

Categorization has immediate behavioral effects (Fazio & Olson, 2003). Unacknowledged outgroup stereotypes spill over to more distant, less friendly nonverbal cues that can poison an interaction (Dovidio, Kawakami, & Gaertner, 2002; Word, Zanna, & Cooper, 1974). People combine cues, encoding an actor's social category along with behavior: In the who-said-what paradigm, people misremember by group; they confuse speakers' statements within category more than between categories (a woman said it, but which one? Taylor, Fiske, Etcoff, & Ruderman, 1978; see Chapter 12 for a thorough review). The point here is simply that social categories have immediate cognitive and behavioral effects that are more automatic than most people realize.

To be sure, category activation is conditionally automatic, depending on cognitive factors: overload (Gilbert & Hixon, 1991), categorizing instructions (Wheeler & Fiske, 2005), practice (Kawakami et al., 2000), category relevance (Quinn & Macrae, 2005), and category accessibility (Castelli, Macrae, Zogmaister, & Arcuri, 2004). Motivational factors also matter: Perspective-taking (Galinsky & Moskowitz, 2000), motivation (Blair & Banaji, 1996), and guilt (Hing, Li, & Zanna, 2002) can reduce spontaneous stereotyping. Social categorization is less automatic than researchers first thought. But categorization by social group is more automatic than lay people think: integral to social cognition, yet often unexamined.

Ambiguous Categories

Social categorization also goes unremarked because of its ambiguity in two respects. First, people categorizing people are self-categorizing, differentiating ingroup from outgroup. And they favor the ingroup at least as much as disfavoring the outgroup (Brewer, 2007). Being comfortable with people like yourself is only human; the fit feels right. However, in a zero-sum world, this tendency denies access to those in the outgroup, perpetuating segregated settings. Ingroup positivity makes bias ambiguous because people think of bias as being anti-them, no so much pro-us. Nevertheless, both are biases that disadvantage some categories of people.

Second, categories are not only ambiguous in their effects but also in their origins. People belong to multiple categories (Bodenhausen, Kang, & Peery, 2012), categories' boundaries overlap (Freeman & Ambady, 2009), and mash-ups combine categories (Nicolas, de la Fuente, & Fiske, 2017), all in unexpected ways that disguise the influence of categories.

Ambivalent Categories

Social categorization is often unexamined, too, because it is often ambivalent, mixing positive and negative attributions (Fiske, Cuddy, Glick, & Xu, 2002). Groups are not only viewed as admirable and praiseworthy

(us, the middle class, our citizens) versus stereotyped as contemptible and disgusting (the homeless, drug addicts, undocumented immigrants), though this certainly represents the worst case. But there's more. Groups categorized as pitiful (old people, disabled people) are trusted but disrespected. Groups categorized as enviable (rich people, business people) are respected but not trusted. Perceivers can cite their liking for elders and their respect for CEOs as evidence of being unbiased, but the positive in the one dimension implies the negative on the other dimension, in stereotyping by omission (Bergsieker, Leslie, Constantine, & Fiske, 2012).

How Cognition Generates Affect and Behavior

Social cognition certainly guides affective and behavioral responses to other people, but research has been slow to establish the links (Macrae & Miles, 2012). Almost certainly, affect and motivation play decisive roles in linking social cognition to social behavior.

Cognition and Affect: Mutual Influence

Cognition influences affect, and vice versa (Fiske & Taylor, 2017, Chapters 13 and 14). To illustrate the first, cognition-affect, attributional analyses guide emotions (Weiner, 1987): A person with bad outcomes (your crush has a broken leg) will elicit pity if blameless (an uncontrollable accident) but will elicit anger if responsible (poor choice of substance use). The cognitively driven causal analysis results in emotions. Similarly, people appraise events and situations for pleasantness, responsibility, certainty, attention, effort, and control, with these various cognitive appraisals leading to various emotions (Smith & Ellsworth, 1985). Not all emotions result from such deliberate analysis, but some from more automatic cognitive processes: Sometimes spontaneously categorizing someone as resembling an old flame will trigger emotions accordingly (Andersen, Saribay, & Przybylinski, 2012). All these cognition-affect linkages also facilitate associated behavior.

Conversely, affect influences cognition, as shown by evaluative priming research reviewed earlier. Transitory mood also shapes cognition: Memory, judgment, decision-making style, persuasion, and well-being all respond to feeling state. Most often, good moods prime relatively superficial and optimistic responses, compared with neutral moods. Negative mood are more variable effects because people actively try to escape them (for details, see Fiske & Taylor, Chapter 14). Moods and their effects in turn may guide behavior.

When Do Cognitions Predict Behavior?

Mostly, cognitions predict behavior when they are strong, relevant, and accessible; when the situation and the person encourage acting on one's own interpretation; and when they are measured at comparable levels of generality. The attitude-behavior literature teaches this (see Fiske & Taylor, 2017, Chapter 15; also see Chapter 12).

Distinctive to social cognition are impression management and other social goals. Typically, people try to make a positive impression, for example, by ingratiating to seem likable or self-promoting to seem competent (Jones & Pittman, 1982; also see Chapter 12). When they cannot avoid a negative impression, they may self-handicap, making excuses.

Impression managers also use behavior to test hypotheses about others, but they may easily behave in ways that confirm their hypotheses: They ask leading questions, selectively interpret answers, nonverbally communicate expectations, and reinforce confirmatory responses (Darley & Fazio, 1980). Self-confident targets and self-doubting perceivers can prevent behavioral confirmation.

Conclusion

Social perceivers engage in thinking for doing, so many social cognition strategies are functional much of the time (Fiske, 1992). Motivated tacticians balance automatic and controlled processes, allocate attention and dedicate memory to diagnostic information. Mind-reading attributes traits and intentions, categorization by social group attributes stereotypes, and attributions and appraisals elicit emotions.

Together, these processes produce social behavior. Social cognition shapes the social interactions that the rest of the book describes; in that sense, social cognition is foundational. But the influence goes both ways, as social cognition results from social interaction. For both reasons, it is emphatically *social* cognition, as you'll soon see.

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