11 The Fabric of Social Life

Mimicry, Fantasy, Fiction, and Morality

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11.1 Behavioral Mimicry and Social Bonds

This final chapter explores the warp and woof of social life. It shows how many of our distinctively human social traits are interwoven with simulational propensities. The discussion isn't restricted to mentalizing; it strolls through other topics related to simulation, including the psychological underpinnings of social bonds, our fascination with fiction, and the relevance of simulation and empathy to moral theory.

Our picture of today's world is dominated by the specter of terrorism; it's hard not to think of the human race as embroiled in feuds, warfare, and violence. From another perspective, however, it can seem surprising how extensive and strong are the bonds that hold people together, strangers as well as kin, supporting all sorts of social structures and patterns of interaction. What forges and maintains these bonds? Are there hidden sides of human psychology that promote the creation and maintenance of interpersonal bonds? This section looks at one social psychological approach to the question, focussed on behavioral mimicry. Behavioral mimicry is germane to simulation because it's a species of interpersonal simulation, though not (on its face, at any rate) a species of mental simulation.

The topic of unconscious mimicry has a considerable history, going back at least to Adam Smith (1759/1976). Chapter 6 reviewed evidence of automatic facial mimicry, but automatic mimicry is not restricted to the face. Postural mimicry has been observed in many studies (Scheflen, 1964; La France, 1979, 1982; La France and Broadbent, 1976), and so has rhythmic synchrony in speech and bodily movement (Bernieri, 1988; Condon and Ogston, 1966; see Hatfield et al., 1994, for a review). Zajonc, Adelmann, Murphy, and Niedenthal (1987) found that couples grow to resemble each other the longer they are together, a pattern that could be the product of years of unconscious mimicking of a partner's facial expressions. Until recently, there has been no baseline or control group with which to measure amounts of mimicry, and one statistical test suggested that it didn't occur more often than chance (Bernieri, 1988). Against this background, Tanya Chartrand and John Bargh (1999) studied the phenomenon with more experimental controls.

They approached the subject from the perspective of experiments reported in section 7.4. In contrast with previous studies, Chartrand and Bargh hypothesized that mimicry occurs not only between people who have prior “rapport” with one another but also among strangers. They theorized that mimicry is an automatic product of what Wilhelm Prinz (1990) calls a “common-
coding” principle: a shared representational system for perceiving and performing behaviors. (Prinz's shared representational system is a cousin of the mirror-system theory.) Thus, Chartrand and Bargh view behavioral mimicry as proceeding without conscious choice or guidance, prompting their label “the chameleon effect.” They conjecture that automatic behavior matching serves as social “glue” that produces empathic understanding and liking between people, without their deliberately intending to bring this about.

Chartrand and Bargh's first experiment tested unintentional mimicry between strangers. Each participant was paired with a partner—really a confederate—and they were placed in a room together, seated about a meter apart. The participant could see the partner's mannerisms during the interaction. Under a cover story, the participant and the partner took turns describing various photographs. The confederate adopted a preselected mannerism and facial expression throughout the interaction, either rubbing his face or shaking his foot and either smiling or maintaining a neutral face. After all photographs had been described, a second partner (also a confederate) was brought in for another session with photographs, and this one displayed the “other” mannerism and facial expression (rubbing her face versus shaking her foot, and smiling versus not smiling). From each confederate's expression, there was a significant effect on the participant. Participants smiled more times per minute when they were with the smiling confederate than with the neutral-faced confederate. They rubbed their faces more times when in the presence of the face-rubbing confederate than with the foot-shaking confederate, and shook their feet more times with the foot-shaking confederate than with the face-rubbing confederate. Thus, individuals took on mannerisms and facial expressions of those around them without any intention or reason to do so.

The automaticity of the chameleon effect was evidenced by participants' failure to mention the partners' mannerisms during debriefing questions.

Their debriefing comments suggested total lack of awareness that they had mimicked the confederate. Moreover, the chameleon effect did not seem to be goal dependent—for example, not dependent on an affiliation goal. This was evidenced by the fact that the participants did not mimic the foot-shaking and face-rubbing behaviors of the smiling confederate to the exclusion of the nonsmiling confederate. Finally, because the confederates' behavior was predetermined and standardized, it was clear who was mimicking whom, hence the causal direction of the effect. It also excluded any third factor as the cause of the behavioral similarity.

What adaptive function might be served by the chameleon effect? Chartrand and Bargh's second experiment asked whether behavior matching is related to greater liking and rapport between the interactants. Their hypothesis was that it serves the basic human need to belong and to form and maintain stable relationships. Automatically behaving in a similar manner to other group members keeps an individual from standing out as different and helps prevent social distance from other group members. La France (1982) had previously found that students frequently displayed the same postural configuration as that of the teacher, and the extent of postural
similarity was positively correlated with the students' ratings of rapport, involvement, and togetherness. Additional studies have also found that behavioral mimicry leads to emotional convergence between interacting partners (Charney, 1966; Trout and Rosenfeld, 1980).

In Chartrand and Bargh's second experiment, confederates either mirrored the behavioral mannerisms of the participant throughout the interaction or engaged in neutral mannerisms (control condition). Afterward, participants completed a questionnaire that asked them to report how much they liked the partner and how smoothly the interaction had gone. Participants liked the partner more when the latter had mirrored the participant than in the control condition. They also reported smoother interaction when there had been mirroring. However, participants weren't aware they had been mimicked. During the debriefing, they were asked whether they noticed anything in particular about the confederate's behavior or mannerisms. Only 1 of 37 participants in the mimicking condition noticed that the confederate had used a similar mannerism, and that sole participant didn't interpret it as mimicry.

Not everyone engages in mimicry to the same extent. Chartrand and Bargh speculated that one individual difference related to mimicry is empathy. They distinguish between two senses of “empathy,” cognitive and affective, where cognitive empathy is equated with perspective taking. To measure perspective taking, they used the perspective-taking subscale of Davis's (1980) Interpersonal Reactivity Index, which assesses the tendency to spontaneously adopt the psychological point of view of others. They divided their participants into high and low perspective takers and found that high perspective takers engaged in significantly more mimicking than did low perspective takers. By contrast, there was no main effect of empathic concern (affective empathy) on the frequency of mimicking.

Chartrand and Bargh conclude that cohesion and liking within a group are promoted by unconscious mimicking of one another's facial expressions, postures, and mannerisms. This chameleon effect also contributes, they suspect, to effective behavior coordination among group members. This is not unlike schools of fish or flocks of birds, which achieve synchrony and immediacy in behavior coordination as an automatic and direct effect of perception on behavior (Reynolds, 1987, 1993).

11.2 Coordination, Fantasy, and Erotic Stimulation

As just noted, the chameleon effect appears to be a perception-driven affair. This characterizes one level of human sociality but hardly exhausts the human capacity for coordination or affiliation. Compared with other species, human coordination is relatively free of requirements of mutual perception. Social coordination and cooperation can be mediated by indirect, long-distance communication, utilizing a variety of communication technologies (the Internet being only the most recent, vivid example). Common to all such communication is high-level
mindreading. If the arguments of earlier chapters are correct, a large chunk of such mindreading involves E-imagination. Cooperation also occurs in the absence of communication, and E-imagination can be helpful here as well.

An intriguing example is found in the functional neuroimaging literature. A group of neuroeconomists, McCabe, Houser, Ryan, Smith, and Trouard (2001), studied the brain activity of individuals who played standard two-person “trust and reciprocity” games while ensconced in a scanner. In any given game, a subject's opponent was either another human or a computer (and subjects were told which was the opponent for each game). In a trust game, one can make moves that are either cooperative or noncooperative. Half of the subjects consistently attempted cooperation when playing with human counterparts. Within this group, regions of prefrontal cortex (especially medial prefrontal cortex) were more active when playing a human than when playing a computer (which used a fixed and known probabilistic strategy). Within the group of noncooperators, no significant differences were found in prefrontal activation between computer and human conditions. One possible explanation (not offered by McCabe et al.) is that cooperators, when playing against other humans, engaged in E-imagination-driven thinking, whereas noncooperators and cooperators, when playing against computers, used purely theoretical, strategic-driven thinking.

E-imagination seems particularly crucial in other idiosyncratic corners of human life. Consider the quirky obsession with the “lives of the rich and famous.” This absorption includes high levels of devotion to the private lives of selected individuals, expressed in the consumption of gossip, books and magazine stories, films and television shows, or desires to display their names, signs, styles, or emblems. Targeted individuals include the living and the dead, heroes and villains. What is the source of such preoccupations? Perhaps sheer curiosity. The rich and famous are statistically unusual in various respects, which might spark the intellect to dwell on their atypical features. As a complete explanation, this seems weak. Curiosity hardly explains the unique niche that the rich and famous occupy in some people's fantasies and daydreams. A more compelling explanation is that these are acts of E-imagination in which they adopt the celebrity's persona and feel “what it is like” to be him or her, what it feels like to hit the game-winning home run and receive the crowd's accolades.

Even if this is right, why is mental impersonation of precisely this group so attractive? There may be no single answer. Perhaps it's not just the pleasure of vicariously enjoying the luxuries and attention lavished on the stars, but it's also satisfying, for different reasons, to vicariously undergo their pains and anguish, their failed romances, their bouts with addiction and depression. The latter can generate the feeling that one isn't so bad off oneself (see section 11.8.2). Whatever the reason, vicarious immersion in the lives of the rich and famous is rampant.

Fascination by erotic materials is another popular pursuit that enlists interpersonal mental
simulation. To introduce this theme, consider a distinctly nonerotic example. In a passage quoted in section 1.5, Adam Smith describes a reader's pleasure being enlivened by sympathy with another's:

When we have read a book or poem so often that we can no longer find any amusement in reading it by ourselves, we can still take pleasure in reading it to a companion. To him it has all the graces of novelty; we enter into the surprise and admiration which it naturally excites in him, but which it is no longer capable of exciting in us; we consider all the ideas which it presents rather in the light in which they appear to him, than in that in which they appear to ourselves, and we are amused by sympathy with his amusement which thus enlivens our own. (1759/1976: 14)

A parallel phenomenon seems to be part of the erotic power of sexually arousing depictions. Of course, visual or verbal depictions of a sexual target's body or behavior can be erotically arousing in themselves. But, equally clearly, an observer's erotic arousal can be enhanced and enlivened by the depiction of a partner who is erotically aroused by the target. Like Smith's reader, the observer's arousal can be heightened by mental projection into the partner's shoes (or whatever), that is, by simulating the partner's arousal. People who engage in ménages à trois presumably exploit such sympathetic or empathetic mechanisms to heighten their sexual pleasure.