



Grounding Oughtness: Morality of Coordination, Immorality of Disruption

Dustin S. Stoltz and Michael Lee Wood

Abstract

How is morality related to cooperation? One common model posits that morality facilitates cooperation, insofar as the adherence to explicit rules or guidelines for collective practices enables or abets these practices. In this chapter, we draw on work from phenomenology, ethnomethodology, and the cognitive sciences to discuss an alternative model that flips this perspective on its head. While acknowledging that cooperation is facilitated by explicit rules and deliberative rule-making in some cases, we argue that frequently, morality emerges as people participate and gain skill in embodied, situated, coordinated activity. Morality here is grounded in the phenomenological experience of “oughtness,” or the immediate feeling that things “ought” to be a certain way, cultivated via repeated practical experience. Accordingly, immorality is grounded in the feeling that one’s sense of “oughtness” associated with a practice has been impeded, which often results in conscious moral deliberation. By grounding morality in the sense of “oughtness” cultivated via local, practical experience, this model has

promising implications for research on moral variation and the socio-historical antecedents of moral deliberation and resultant moral frameworks.

Keywords

Embodiment · Coordination · Disruption · Immorality · Practice

Morality is about what *ought to be*, either descriptively or prescriptively: what a people *feel is* good to do or what *is* good to do, both for themselves and others.¹ In social theory, morality is commonly placed at the center of establishing and maintaining collective practices and goods, in opposition to individual self-interest (Durkheim,

¹ Following Heimer (2010, pp. 180–1): “Morality is about what people feel they ought to do; it is about distinguishing what people feel is right from what seems to them wrong” and Durkheim [1895] (1982, pp. 80–81): “To decide whether a precept is a moral one or not we must investigate whether it presents the external mark of morality. This mark consists of a widespread, repressive sanction, that is to say a condemnation by public opinion. . . . Whenever we are confronted with a fact that presents this characteristic we have no right to deny its moral character, for this is proof that it is of the same nature as other moral facts.” This also aligns with Whiteley (2020, pp. 22–23) who offers two possible definitions of morality: “no rule is part of a community’s morality if people can openly break that rule without incurring the hostility and disapproval of their neighbours. . .” and “morality comprises those actions which I think I ought to do regardless of inclination and regardless of personal advantage.”

D. S. Stoltz (✉)
Department of Sociology and Anthropology, Lehigh
University, Bethlehem, PA, USA
e-mail: dss219@lehigh.edu

M. L. Wood
Department of Sociology, Brigham Young University,
Provo, UT, USA

[1925] 2012, p. 59; Hitlin & Vaisey, 2010). In other words, the moral order enables or abets *cooperation* (but see Lamont (1992) and Luft (2020)):

Protagoras, Hobbes, Hume, and Warnock are all at least broadly in agreement about the problem that morality is needed to solve: limited resources and limited sympathies together generate both competition leading to conflict and an absence of what would be mutually beneficial cooperation (Mackie, 1990, p. 111).

This “decisionist” and “prosocial” perspective (Baron, 1993; Curry, 2016; Kohlberg, 1973; Wikström, 2010) conceptualizes morality in terms of explicit rules or guidelines, developed via deliberation and negotiation in which justifications are discussed and debated, and, eventually, solutions emerge. These explicit rules address the problem of cooperation insofar as complying with the rules facilitates cooperation and staves off shirking. Thus, from this perspective, the moral person is defined objectively as those deciding to comply with these explicit rules (Abend, 2013, 2018). The potential gap between explicit rules and compliance is an acute problem (Bourdieu, 1977; Strauss, 1992; Swidler, 1986), which is sometimes addressed by appealing to processes of deliberate socialization of children (Parsons, 2013, pp. 140–142; see also Wikström, 2010; Kohlberg & Hersh, 1977) or corrective processes (Scott, 2013).

We argue that cooperation, in the sense discussed above, is a special case of coordination: the performance of an activity involving multiple people in proximate times and places, knowingly or unknowingly, simultaneously or sequentially. Coordination is facilitated by explicit rules in at least some cases, but this is only one possible way of understanding the relationship between morality and coordination. In this chapter, we discuss an alternative model that flips the common perspective on its head. Here, instead of explaining how morality facilitates coordination and deliberate cooperation, we describe how participation in coordinated activity provides a foundation for morality and the moral discourse emblematic of deliberate cooperation (Collins, 2014; Tomasello, 2016).

This theoretical move is not entirely without precedent. Like Marx and Engels, for instance, we intend not to “descend from heaven” bearing the universal set of human values, but rather “ascend from earth to heaven.” Not from what people “say, imagine, conceive” but from people “in the flesh” (Marx & Engels, [1845] 1998, p. 42). Similarity, in *Division of Labor*, Durkheim argued that a form of solidarity could emerge “spontaneously” via coordinated labor in complex societies (Durkheim, [1893] 2014). In *Elementary Forms*, Durkheim expanded this argument with a focus on the social origins of collective representations. According to Durkheim, participation in coordinated ritual affords the phenomenon of “collective effervescence” which inspires the “sacred” and “profane” categorization of the world that undergirds all moral and religious life (Durkheim, [1912] 1995). Similar to Durkheim’s interest in religious “feeling” in *Elementary Forms*, we focus our discussion on implicit moral sentiment—a subjective sense of “oughtness” that may or may not give rise to conscious moral deliberation and explicit rules. Although we believe that conscious moral deliberation and rational rule-making may follow this implicit moral feeling, we bracket it as a separate activity. However, we differ significantly from Durkheim insofar as our discussion is grounded in perspectives from contemporary cognitive science, including “multiple memory systems” research (Amodio, 2019; Evans, 2008; Leschziner, 2019; Lizardo et al., 2016) and so-called “E” approaches to cognition—ecological, enactivist, embedded, embodied, extended (Cerulo, 2015; Clark & Chalmers, 1998; Haugeland, 1998; Ignatow, 2010; Lizardo et al., 2020; Pitts-Taylor, 2016; Varela et al., 2017). One major difference here is the relative importance attributed to everyday embodied experience and skill-building (often called “enskilment”), in contrast with Durkheim’s focus on special rituals and his relative inattention to embodiment.

Guided by these contemporary perspectives from the cognitive sciences, and building on ethnomethodological insights and practice theory, we articulate a model of morality based on *implicit* cognitive processing *grounded in*

enskilment and *situated coordination*. Conceptualizing morality in terms of implicit cognitive processing is not new, but unlike other approaches which posit a universal set of (unconscious) values constraining moral possibilities (Haidt, 2012; cf. Martin & Lembo, 2020), our model grounds implicit morality in *local skill development and use*. Specifically, we argue that a phenomenological experience of “oughtness” emerges as skilled people participate in embodied, situated, coordinated activity (Ignatow, 2009a; Pagis, 2010; Winchester, 2008, 2016; Winchester & Pagis, 2021).

Reconsidering the relation between coordination and morality has promising implications for the sociology of morality. First, the model of implicit morality discussed below provides a plausible explanation for how morality arises as a deliberative, discursive enterprise. Although explicit moral deliberation is widely recognized as a social necessity, it is unclear what motivates a person’s engagement in moral deliberation in the first place. Second, because the proposed model is grounded in local experience, it is well-suited for studying moral variation and the “social antecedents of particular moral frameworks” (Hitlin & Vaisey, 2010, p. 6), issues that can be obscured by centering universal moral frameworks. Third, coordination, as we describe it, makes no commitments regarding the social standing of those involved or the extent an outcome of such practices benefits those involved in some objective sense. In short, this model of morality leaves room for considerations of power. Finally, although morality does take the form of rule-based, explicit coordination, this is unlikely to be the *modal way* we experience morality. Commensurate with various sociological approaches to morality (Abend, 2018; Firat & McPherson, 2010; Luft, 2020; Wherry, 2010), morality is conceived here not as a single decision (or string of decisions) set apart from mundane, continuous, collective experience, but as something we experience *within* coordinated activity. The model presented below sharpens our ability to understand “everyday” moral experience.

1 Morality in Implicit Coordination

We begin with the observation that social action is situated in time and space. As such, coordination requires participants to “move together,” both simultaneously and sequentially. For example, people coordinate their actions when waiting in queues (Gibson, 2008; Schwartz, 1975), giving gifts (Caplow, 1984; Healy, 2010; Mauss, 2002), taking turns in conversations (Sacks, 2014), and engaging in religious rituals or protest movements (Effler, 2010; McNeill, 1997). Ethnographic and phenomenological work on social practices reveals that such coordination is dependent on developing nondeclarative abilities, what is sometimes called “enskilment” (Pálsson, 1994). Social practices requiring the coordination of bodies in time and space are not sustainable by explicit rules alone (Dreyfus, 1992). Rule-following not only encounters the problem of ambiguity and infinite regress (Bourdieu, 1977; Garfinkel, 1967; Heritage, 2013, p. 126; Kripke, 1982; Wittgenstein, 1953 § 201), but, more importantly, is simply too slow. Consider, for example, the fractions-of-second overlap between turn-takers in typical conversation (Jefferson, 1973). Instead, such practices are sustained by participants’ embodied “know-how” enabling them to respond to the continuously unfolding temporal and spatial dynamics (Lande, 2007), which in turn makes their actions reliable information for other participants in the situation (Garfinkel, 1967, p. 173; Goffman, 1972, p. 13; Rawls, 2010; Simmel, 1950, p. 379; Stoltz & Lizardo, 2018).²

As people observe others and participate in a social activity, they develop three types of nondeclarative associations: (1) procedural skill, (2) affective associations, and (3) conceptual associations (Amodio, 2019). Procedural skill is

² As Weber (1978, pp. 21–22) writes, “in the great majority of cases actual action goes on in a state of inarticulate half-consciousness or actual unconsciousness. . .the ideal type of meaningful action where the meaning is fully conscious and explicit is a marginal case” (see also Bargh & Morsella, 2008; Davidson, 2004).

the “know-how” facilitating participation (discussed above). Importantly, this “know-how” does not develop in the abstract, but in an embodied participant in concrete situations (Barsalou, 2016; Giddens, 1979, p. 24; Ignatow, 2009b). In other words, as one practices, they experience emotions and observe patterns in their environment. As a result, procedural skill becomes associated with affective and conceptual associations. For example, in terms of affect, drivers might develop associations between certain emotions and traffic patterns, and athletes between certain emotions and competitive outcomes. In terms of conceptual associations, drivers might develop implicit models of different types of driving situations, such as “city driving” (including perhaps, stoplights, and pedestrians) and “freeway driving” (including perhaps, on/off-ramps and large, green signs).

Over time, the situated, tripartite nature of *enskilment* imparts skilled participants with a sense of “oughtness,” which emerges in different ways. In some cases, “oughtness” is grounded in associations between emotions and skill-use. For example, when skilled people are engaged in a practice with other skilled people who all know how to synchronize their movements, participants can carry out the practice smoothly, even “without thinking” (Dreyfus & Dreyfus, 1980). This “smoothness” may engender a sense of “oughtness” insofar as participants come to affectively value this experience above others. A “moral” person, then, from this perspective, is not necessarily someone who knows and follows all the explicit rules or can express justifications for their actions or beliefs, but one who is able to participate in a coordinated social practice without disrupting an affectively valued state, such as “flow” (Nakamura & Csikszentmihalyi, 2014). In other cases, “oughtness” may be grounded in emotional attachments to conceptual associations. For example, a veteran participant (or even observer) who has many positive experiences concurrent with the activation of an implicit conceptual model of a practice may develop a strong sense that the practice “ought” to be done in a *particular* way, even if other ways might yield the same outcome. Below, we discuss these two

senses of “oughtness” using the examples of automobile driving and boxing. The main implication is that in all these cases, coordinated practices are implicitly *moral*, by virtue of these situated associations.

This model of implicit morality has several distinct features which set it apart from other models of morality. First and foremost, it is grounded in embodied skill, that is, *enskilment*. As people participate in social practices, they develop procedural memory (a form of nondeclarative memory) that enables them to meet the demands of the practice (Squire, 1992). New participants “literally become something different,” altering their sensorimotor structures in a way that “respond appropriately to events in the world through acquired skills” (Lande, 2007, p. 105). During this process of “becoming,” skilled participants develop a sense of “oughtness” about behaviors and environments that facilitates the practice (Gibson, 1963; Gibson & Pick, 2000).

Second, this model of morality makes no assumptions about what counts as “moral” (Haidt, 2012). Instead, it focuses on the cultivated sense of “oughtness,” the affective allure of the smoothness of practice, and the phenomenological experience of having one’s practical and conceptual expectations frustrated (Damasio, 1999; Goffman, 1983; Rawls, 1987, 1989, 2010). As we discuss below, people can and do respond in different ways to these disruptions, ranging from tolerant understanding to explicit moral condemnation. Although one could limit the analysis of morality to cases that are explicitly identified by participants or observers as “moral issues,” we argue that by studying the phenomenological experience of “oughtness” grounded in practical coordination, we can develop a better understanding of how and why explicit moral deliberation emerges and make progress toward a more general theory of moralization.

Third, this model of implicit morality is radically local. *Enskilment* is always *enskilment* in a particular setting, with a particular ecological structure that varies over time and space, and which anticipates certain kinds of bodies over others (Engman & Cranford, 2016; Pitts-Taylor,

2015). In terms of morality, it means that the sense of “oughtness” described above is also locally grounded. Perception of a situation is direct. In most cases, there is no need “interpret” the situation by applying a “lens” or some other declarative moral device. Participants sense the virtue of a moment immanently. Although a participant may potentially “carry over” a feeling of “oughtness” or even a conceptual understanding of an activity from one situation to the next, these moral feelings emerge from grounded, local experience (Barsalou et al., 2003; Barsalou & Medin, 1986).

This last point is especially important to distinguish the proposed model from another cognitively motivated model of morality. This other model is built on a similar dual-process approach but is founded on the notion that there is a universal set of moral values (Haidt, 2012; Rozin et al., 1999; Shweder & Haidt, 1993). This “universal moral values” model proposes that each moral value may be *weighted* differently for each individual or each group—for example, one group may place a high weight on “fairness” while another group weights “loyalty” high. Ultimately, though, humans have a limited range of options.

In contrast, the model of morality as “situated oughtness” has no need for a set of universal values (which is not to say it is incompatible). Moral feelings emerge in grounded, local situations, and are therefore particular. To the extent we observe widely shared *regularities* in moral feeling, it is a reflection of the (1) regularities in the perceptual structures upon which our vision, hearing, and general proprioception rely (Gibson, 2014; Merleau-Ponty, 1962), (2) regularities in the structured environment (Engman & Cranford, 2016), and regularities in the biographies of participants (Bourdieu, 1977; Strauss & Quinn, 1997; Lamont, 1992; Bloch, 2015). That is, observed regularities are not attributed to universal inherent human qualities, nor cultural forces constraining individuals from above, but rather to the overlapping pieces of peoples’ biographies, “below” the individual. “When going ‘below’ the individual, [sociologists] will not find

atomized elements, but rather the repository of shared cognitive processes constitutive of ‘socially embodied’ collective knowledge” (Lizardo et al., 2020, p. 20).

This framework builds upon ethnomethodology and interactionist insight into the co-constituted (and local) nature of social situations (Garfinkel, 1967; Goffman, 1972, p. 13), but extends it with an increased focus on the implications of embodiment. Ethnomethodologists observed, via compelling experiments such as the “conversation clarification” task, in which experimenters would ask dumb questions about “what everybody knows,” that people had a sense of “oughtness” associated with conversation, manifest when research subjects “rapidly and powerfully sanctioned” experimenters for their breaching questions. The subject “treated the intelligible character of his own talk as something to which he was morally entitled” (Heritage, 2013, pp. 80–81). These findings are consistent with the framework developed here. However, ethnomethodologists concluded that these disruptions could be easily remedied with deliberative negotiation: the disrupted would simply “provide an account.”

Repairing disrupted practices is not always so easy. Many disruptions result from a mismatch between a person’s current skill and the demands of the current situation. In other words, our capacity to meet the local requirements of skillful coordination is a matter of relatively durable products of our biographies (Kiley & Vaisey, 2020), and cannot always be altered without investing time and effort in enskilment. This is not to say that regularity outside of discourse is impossible, however. Although individual biographies are unique, there will always be overlapping experiences between any two people—even if only in the most mundane human experiences of, say, verticality (Schwartz, 1981). These mundane, overlapping experiences provide a bedrock for “collective representations” below the level of the individual, yet manifesting as routine social interactions (Lizardo et al., 2020).

2 Immorality in the Disruption of Implicit Coordination

We proposed grounding the concept of “morality” in the embodied sense of “oughtness” emerging with the skill development within situated, coordinated practice. Accordingly, we propose grounding “immorality” in the feeling that one’s sense of “oughtness” associated with practice has been impeded (Garfinkel, 1967; Tavory & Fine, 2020). In the remainder of this chapter, we provide empirical support for this model of morality by reviewing ethnographic research on coordinated social practices that make observations about participants’ phenomenological experiences. In the course of situated practice, events sometimes occur which *evoke in skilled participants automatic, negative responses of varying degrees of intensity*. In other words, skilled participants have a clear sense of what “ought to be” that often goes unnoticed *until* it is disrupted. Emotion—as “thoughts somehow felt in flushes, pulses, ‘movements’ of our livers, minds, hearts, stomachs, skin” (Rosaldo, 1984, p. 143)—plays a central role in both fueling the pleasures of smoothness and directing one’s attention toward the sources of disruption (Damasio, 1999; Easterbrook, 1959).

Before reviewing the ethnographic data, we wish to respond to potential criticism. The reader may reasonably ask whether this embodied sense of “oughtness” should be interpreted as a form of “morality” (Hitlin & Vaisey, 2010, pp. 5–6). After all, people respond to disruptions in different ways, for example, by attributing malintent to another party or charitably dismissing their actions as a “novice mistake” or even “meditating” on the discomfort (Pagis, 2010; Winchester, 2008). However, this higher-order processing (*conscious* and *deliberative*) presupposes the existence of *implicit* expectations about how things “ought to be,” such that a skilled participant *immediately* feels when something has gone wrong, and often feels it quite deeply. In this way, our description of an implicit sense of “oughtness” as a form of morality aligns

with Abend’s concept of the “moral background” (Abend, 2014).

We organize our discussion of the relevant research around two distinct ideal-typical ways the practice-based, implicit, and affective sense of “oughtness” can be disrupted. The first involves *procedural memory*, that is, the “know-how” people develop enabling them to participate as skilled practitioners. Here, disruption entails an undesirable interference with or coercion of procedural ability. The second involves nondeclarative conceptual associations. As people become skilled and gain experience in a practice, they develop a multi-modal conceptual understanding of the practice, or a schema (Firat & McPherson, 2010; Leschziner & Brett, 2021; McDonnell et al., 2020; Wood et al., 2018). Here, disruption entails witnessing something that violates one’s conceptual understanding of how the practice “ought to be.” We refer to these as *procedural disruption* and *conceptual disruption*, respectively.

2.1 Procedural Disruption

Procedural disruption occurs when a skilled participant’s sense of “oughtness” associated with their skillful ability is violated during a situated practice. Procedural disruptions take two forms: In the extreme case, disruption renders a participant’s skill nonfunctional. These disruptions are experienced as “immoral” insofar as they prevent a skilled participant from achieving their affectively valued end. In other cases, procedural disruption consists in disrupting a skilled participant’s “ideal” skillful experience. In these cases, the participant may still be able to carry on the practice, but they may be coerced to do things that they have come to dislike. Instead of “smooth,” the practice is experienced as “choppy” or “rough.” In this section, we review research on driving and boxing to illustrate the phenomenon of procedural disruption.

Driving is a coordinated practice, and relatively successful given that most driving experiences are quite mundane and uneventful, and most accidents are small and unremarkable

(Lupton, 2002; Michael, 2020).³ Successful coordination among drivers is dependent on embodied, procedural skill (Charlton & Starkey, 2011). Although driving does have explicit rules, these rules are taken as loose guidelines (Goffman, 1972; Rothe, 1992), and are thus incapable of explaining the successful coordination of driving. Were this not so, programming self-driving vehicles would be a relatively easy problem of teaching a computer all the explicit rules (Dreyfus, 1992).

The morality of driving is most commonly grounded in expectations and tastes associated with skillful implicit coordination, rather than adherence to explicit rules. As Katz (1999, p. 25) observes, “anger at other drivers is very systematically limited to only certain patterns of spatial interrelationship” (e.g., specific driving situations), and not explicit rules. Explicit rules do not encompass all the ways drivers’ intentions are made “accountable” to other drivers’ (Laurier, 2004; Livingston, 1987, pp. 28–30; Nuhrat, 2020). In fact, breaking explicit traffic laws is often considered justified, even by police and judges (Goffman, 1972). For example, although explicit speed minimums and maximums exist, drivers commonly drive above or below posted speed limits, in most cases driving much faster or slower than they are comfortable to respond appropriately to current road and traffic conditions (Charlton et al., 2010; Charlton & Starkey, 2017).

The implicit morality of driving is manifested in the fact that driving routinely sparks *automatic, negative responses*, including “road rage” and aggressive driving, provoked by violations of implicit expectations and tastes (Nuhrat, 2020). Invectives and curses are common among drivers and arise spontaneously when driving is disrupted (Katz, 1999).

In the case of procedural disruption, the relevant implicit “oughtness” of driving consists in (1) the implicit expectation that one should be able to arrive at one’s destination, given one’s

skill, and (2) implicit tastes and distastes for certain driving situations. In the first case, a procedural disruption comprises anything that renders a participant’s ability to drive nonfunctional, such as getting hit by another driver. In the case of implicit tastes, a procedural disruption comprises anything that coerces the driver into an undesirable state of practice.

Consider, for example, maintaining an “appropriate” distance from other vehicles as a central, yet implicit, part of driving. The distance between the grill of one’s own car and the rear bumper of a car in front is a constantly changing dynamic, and skilled drivers effectively gauge distance while all the “pieces” of the system are constantly altering speeds and distances (Charlton & Starkey, 2013; Yanko & Spalek, 2013). Drivers perceive a “field of safe travel” that “shifts and changes continually, bending and twisting with the road, and also elongating or contracting, widening or narrowing, according as obstacles encroach upon it and limit its boundaries” (Gibson & Crooks, 1938, p. 455). Although drivers can and do skillfully cope with other drivers making this task more difficult (e.g., by passing too closely in front of them or following too closely behind), these disruptions immediately evoke a negative affective response. Drivers who “cut off” or “tailgate” another become the targets of vicious moral opprobrium and even physical violence from their victims who insist on “getting even” or “teaching them a lesson” (Katz, 1999).

Importantly, the situations eliciting procedural disruptions are grounded in the expectations and tastes of local coordinated practice, grounded in embodied, action-specific skill (Witt & Proffitt, 2008). In the case of coordinated distance, local patterns will determine what distance is “appropriate.” What counts as “inappropriately close” in Philadelphia may not necessarily be the same in Salt Lake City. Similarly, the implicit moral sense of citizen drivers is likely different from NASCAR drivers who in their specialized vehicles routinely “bump” or “trade paint” (Shackleford, 1999). Similarly, the right to space, such as what vehicles are allowed in which lanes and who “deserves” parking spots are both codified yet grounded in local “folk”

³ This in no way minimizes the fact that driving is the most dangerous common mode of transportation (Savage, 2013).

understandings of propriety (Taylor, 2014; Nuhrat, 2020).

Institutions invested in facilitating a certain state of practice may develop local techniques to promote this state and mitigate disruptions. For example, boxing gyms facilitate sparring, which are playful simulations that “allow practitioners to experiment with technical skills and social rank more freely than if their performance was of high consequence” (Hoffman, 2006, p. 175). To facilitate effective sparring and avoid disrupting its playful instructiveness, boxers are required to move through “phases,” in which newcomers are “socially quarantined” and must display competence in one phase before moving on to the next (Hoffman, 2006, pp. 183–5). Additionally, more skilled boxers must learn to “hold back.” According to one boxing coach: “You gotta remember that your sparring partner is your friend. You’re a little bit better than he is. Let him hit you in the body sometimes . . . and don’t hit him back too hard” (Hoffman, 2006, p. 185). Furthermore, as in other martial arts gyms, “real fighting” is antithetical to learning how to fight. Heated emotional exchanges associated with a real fight are procedurally disruptive to the practice of a boxing gym, so, coaches may “[stop] sessions where the fighters were getting too frustrated, angry, or competitive” (Hoffman, 2006, p. 184). In sum, as a social practice in which participants create a collective good, boxing requires local enskilment that is more than knowing how to throw punches—avoiding procedural disruption requires the know-how to be a good partner.

2.2 Conceptual Disruption

Conceptual disruption occurs when something violates an observer’s affectively laden implicit conceptual understanding of the practice. Unlike procedural disruption, which occurs during participation in a coordinated practice, conceptual disruption occurs during observation or recollection of a coordinated practice. Importantly, however, conceptual disruption is, like procedural disruption, grounded in skillful practice. As

people develop skill in a coordinated practice, they also develop implicit conceptual associations, including an understanding of what things are relevant to the practice and how relevant things move. The situatedness of skill development means that people also develop affective associations with these conceptual associations, providing the groundwork for conceptual disruption by pairing an understanding of “what is” with feelings of attraction or repulsion. Conceptual disruptions are experienced as “immoral” insofar as they violate an observer’s implicit sense of how the observed practice “ought to be.”

One of the authors (Wood) elicited such a conceptual disruption by riding his bicycle on the road in a small Utah city, which provoked a driver in a passing pickup going in the opposite direction to stick their head out the window and shout, “get the fuck off the road!” The response suggests that the driver had an affectively laden implicit conceptual model of city transportation which rendered bikes “out of place,” such that witnessing a cyclist on the road constituted a negative conceptual disruption. Similarly, Goffman describes “pedestrians [seeing] a motorist drive into a parked car, ruin a fender, and drive off,” in that moment they feel an “action so improper . . . even though they themselves are not directly involved . . . [they sense] a desire to take some action against the offender” (Goffman, 1972, p. 265). The bystanders are not directly impacted by the crash, nor is their car damaged. In both this case and the case of the impolite pickup driver, mere observation was sufficient to evoke affective responses, despite not being directly affected by the “immoral” practice.

The affective impact of conceptual disruption may be partially explained by the subjective realism of *embodied simulation* (Cerulo, 2018; Gallese, 2011). First, sensorimotor patterns involved in a practice are also (partially) activated when *observing* others engaging in that practice (Bloch, 2015; Cerulo et al., 2021, pp. 65–66; Heyes & Catmur, 2022; Molenberghs et al., 2012). This fusion of perception and action is a special case of a more general cognitive mechanism called *neural reuse*. This describes the ways “different parts of the [central nervous system] are

used and reused to accomplish different functions at multiple spatial scales” (Raja & Anderson, 2019, p. 171). During embodied simulation, participants “create mental experiences of perception and action in the absence of their external manifestation. . .” (Bergen, 2012, p. 14). Furthermore, this process “makes use of the same parts of the brain that are dedicated to directly interacting with the world. . .simulation creates echoes in our brains of previous experiences” (Bergen, 2012, pp. 14–15; see also Gallese & Lakoff, 2005). Even abstract conceptual knowledge is, therefore, grounded in the body and environment (Barsalou et al., 2003; Barsalou & Medin, 1986).

Consider, for example, an instance of reprimand when the disruptor and disruptee are not co-present. One of the authors (Stoltz) parked his car on a street for over a week and returned to find a handwritten note in the windshield wiper: “Dickheads double park. You. You’re dickheads.” Being street parking, with no designated parking lines, this was puzzling. To understand the moral transgression, he engaged in embodied simulation—recreating a scenario in which one might interpret his car as taking up “two” spaces, while the vehicles in front and behind rotated throughout the week, parking at various distances. He also considered the scenario of moving his car each night to accommodate the turnover of vehicles: perhaps he was unaware of this local norm? Simulating the practice, and being quite familiar with the routines of this particular street, this scenario seemed unlikely. It was likely, however, that the note writer *simulated* the author parking his car *only after the vehicles immediately in front and behind were parked*. This simulation led to indignation profound enough to justify condemnation.

In pedagogical settings (i.e., parenting, teaching, and coaching), instructors commonly have a sense of how something “ought” to be, and conceptual disruptions commonly elicit admonition. Consider Wacquant’s “carnal ethnography” of boxing. Pugilism, according to Wacquant’s participants, involves an “all-embracing ascetic life plan”:

It is believed that an ordinary boxer who conscientiously abides by the commandments of the pugilistic catechism, as they apply in particular to nutrition, social life, and sexual activity, stands every chance of toppling a more talented but dissipated foe (Wacquant, 1995, p. 513).

Even seemingly disconnected activities can clash with this conceptualization of the activity of boxing. Wacquant, for example, offers an account of the “scandal of the smoking boxer.” While training at the gym, one boxer, Ashante, is telling another, Luke, about an otherwise successful boxer who “wasn’t serious about it.” The key evidence in the story was witnessing the boxer smoking, “I saw him sittin’ in the audience after the fight, puffing away with one of his buddies. Right away, I knew it was over for him.” Luke responds “He was smokin’ after a fight?!! [As if this were an inconceivable monstrosity]?” (Wacquant, 2004, p. 148 Wacquant’s parentheticals). This retelling of a story carries a sense of moral weight precisely because it disrupts the boxers’ conceptual understanding of how the practice ought to be.

3 Discussion

In the preceding, we outlined a theory of morality grounded in implicit coordination, in contrast to morality as explicit cooperation. As coordinated practice in time and space is dynamic and ever-changing, memorizing explicit rules and following them may not only be unnecessary but also insufficient to guarantee “moral” behavior. An unskilled novice who knows and follows explicit rules may nonetheless disrupt other practitioners for lack of skill. Instead, a moral person is someone who responds “appropriately” to the continuously evolving situational dynamics (i.e., in a way that continues the practice without disrupting others). This grounds the sense of oughtness in the smoothness of dynamic, situated practices and thus is the result of skill development and use.

We further argue that the morality of mundane and taken-for-granted acts of ongoing coordination is typically revealed when practices are disrupted. We describe two generic kinds of

disruption, (1) procedural and (2) conceptual. The first entails an undesirable interference with or coercion of procedural ability. The second entails witnessing an action that violates one's conceptual understanding of how the practice "ought to be." As a result of the constant ebb and flow of people with varying degrees of enskilment and with varying experiences in slightly different local ecologies, disruptions are bound to occur. People may attempt to cope with disruptions by making personal changes, but these efforts are constrained by the irreversible investment of time involved in enskilment.

3.1 Responses to Disruption

While the model is well-formed to account for both moral regularity and variation, it remains an open question why some instances of disruption result in mild irritation or even self-reflection (Winchester, 2016) while others result in deliberate chastisement and even overt violence (Garfinkel, 1967). Indeed, like Andy Kaufman's audiences, people may even vacillate between eager elation and raucous rage. This experience of being disrupted by others may become the site of *deliberate moral reasoning* in at least two senses. We refer to these as (1) performance failure and (2) false performance. In both cases, an activity that participants experienced as predominantly automatic now demands their deliberation.

First, enskilled participants may judge an instance of disruption as a performance failure on the part of some other participants. In some cases, these disruptors will be salvageable. They are, perhaps, a novice who has not received the necessary training. They may also be deemed a "foreigner" in the sense that they have familiarity with the practice, but their experience is derived from a different locale, where activities were coordinated in a slightly different way. The solution there is that the foreigner could either be retrained or should "go back" to wherever it is they learned how to engage in the practice. In other cases, the disruptors will be judged unsalvageable. They are morally deficient in essential and immutable ways. Here, the solution would

likely entail barring them from the activity entirely and may be accompanied by the "figurative uses of dumbness as a common line of insult" (Katz, 1999, p. 25).

Second, enskilled participants may judge an instance of disruption as a false performance. In such a scenario, an interloper is attempting to appear as if they have acquired the requisite know-how—or in other words, they have lived a particular kind of life—but, in fact, did not. In some cases, it may be that the disruptor lacks commitment to the practice. The disruptor may also be attempting to pander to the participants, with no investment in continuing to participate in the activity. In the most nefarious instance, the disruptor may be attempting to deliberately sabotage the activities or swindle the other participants. In this latter case, the potential repercussions may be so severe as to entice the disruptors to "cool out" the disrptees so the latter interprets the activities as relatively inevitable (Goffman, 1952).

3.2 Why, When, and How

In the preceding, we argued that automatic, negative responses to disruptions may lead to deliberate responses for both disruptors and disrptees. Importantly, however, the question remains as to under what conditions a procedural or conceptual disruption will result in an automatic, *negative* response. In many ways, this question stands at the heart of broader debates about cultural change (Patterson, 2018; Kiley & Vaisey, 2020; McDonnell et al., 2021). Certainly, in some cases, changing the status quo may be experienced positively, as a pleasant surprise or an act of creativity or liberty (Martin, 2001, p. 203). That is, when is interruption novel versus immoral? And, for whom? Furthermore, acts of disruption are a common tool of protests, and observers' reactions may be mediated by the qualities of the participants and settings (Miller, 1997; Murphy, 1998; Stoltz & Taylor, 2017) and the observer's own relation to those participants and settings. A plausible starting point to this question is in the same sources of variation: the

constant ebb and flow of people with varying degrees of enskilment or experiences with slightly different ecologies.

Closely related is the question of perspective. Participants' enskilment is situated and therefore occupies particular standpoints (Pels, 1996; Sweet, 2020). Participants' embodied skill both engenders a sense of what they ought to do, but also anticipations of what others ought to be doing, and these need not—and often will not—align. The degree to which all participants' sense of “oughtness” are indeed in *alignment* is potentially related to the degree functionalities explicitly discipline others' disruptive actions (Lande, 2007) or “socially quarantine” novices (Hoffman, 2006). This touches on the earlier observation that the proposed model of morality makes no commitments regarding the social standing of those involved. To a higher-status person, for example, what a lower-status person “ought to be doing” is likely not the same as what the higher-status person feels impelled to do. Indeed, should the lower-status person attempt imitation, this could be experienced as disruption.

3.3 The Role of Moral Discourse

Finally, can “oughtness” be passed down without practical grounding? As we argue, disruption may often lead to moral deliberation. Is such deliberation entirely epiphenomenal? We do not think so. We articulate a framework for understanding how oughtness is predominantly grounded, implicit, and embodied, but this does not require the position that every sense of oughtness necessarily emerges and is sustained only in this way. Conceptual understandings of oughtness could be “passed on” without someone engaging in the practice. In other words, in situations of deliberate socialization, oughtness may be instilled in others through primarily linguistic means (Mills, 1940; Vaisey, 2009; Winchester & Green, 2019). This may, however, be marginal and instill an ersatz grasp of what one ought-to-do, without a visceral sense of necessity. Nevertheless, we cannot dismiss that situations of moral education exist,

perhaps most obviously in parenting when one would hope their child avoids wrongdoing rather than learn by experience or coaching where one hopes to avoid mistakes during a competition.

References

- Abend, G. (2013). What the science of morality Doesn't say about morality. *Philosophy of the Social Sciences*, 43(2), 157–200.
- Abend, G. (2014). *The moral background*. Princeton University Press.
- Abend, G. (2018). Moral Decisionism and its discontents. *Journal for the Theory of Social Behaviour*, 49(1), 59–83. <https://doi.org/10.1111/jtsb.12191>
- Amodio, D. (2019). Social cognition 2.0: An interactive memory systems account. *Trends in Cognitive Sciences*, 23(1), 21–33.
- Bargh, J., & Morsella, E. (2008). The unconscious mind. *Perspectives on Psychological Science*, 3(1), 73–79.
- Baron, J. (1993). *Morality and rational choice*. Springer.
- Barsalou, L. (2016). Situated conceptualization. In Y. Coello (Ed.), *Foundations of embodied cognition* (pp. 11–37). Routledge.
- Barsalou, L., & Medin, D. (1986). *Concepts: Static definitions or context-dependent representations?* *Cahiers de Psychologie*.
- Barsalou, L., Simmons, W. K., Barbey, A., & Wilson, C. (2003). Grounding conceptual knowledge in modality-specific systems. *Trends in Cognitive Sciences*, 7(2), 84–91.
- Bergen, B. (2012). *Louder than words*. Basic Books.
- Bloch, M. (2015). *In and out of each other's bodies*. Routledge.
- Bourdieu, P. (1977). *Outline of a theory of practice*. Cambridge University Press.
- Caplow, T. (1984). Rule enforcement without visible means: Christmas gift giving in Middletown. *American Journal of Sociology*, 89(6), 1306–1323.
- Cerulo, K. (2015). The embodied mind: Building on Wacquant's carnal sociology. *Qualitative Sociology*, 38(1), 33–38.
- Cerulo, K. (2018). Scents and sensibility. *American Sociological Review*, 83(2), 361–389.
- Cerulo, K., Leschziner, V., & Shepherd, H. (2021). Rethinking culture and cognition. *Annual Review of Sociology*, 47(1), 63–85.
- Charlton, S., Mackie, H., Baas, P., Hay, K., Menezes, M., & Dixon, C. (2010). Using endemic road features to create self-explaining roads and reduce vehicle speeds. *Accident*, 42(6), 1989–1998.
- Charlton, S., & Starkey, N. (2011). Driving without awareness. *Transportation Research*, 14(6), 456–471.
- Charlton, S., & Starkey, N. (2013). Driving on familiar roads. *Transportation Research*, 19, 121–133.

- Charlton, S., & Starkey, N. (2017). Driving on urban roads: How we come to expect the 'correct' speed. *Accident, 108*, 251–260.
- Clark, A., & Chalmers, D. (1998). The extended mind. *Analysis, 58*(1), 7–19.
- Collins, R. (2014). *Interaction ritual chains*. Princeton University Press.
- Curry, O. S. (2016). Morality as cooperation: A problem-centred approach. In T. K. Shackelford & R. D. Hansen (Eds.), *The evolution of morality* (pp. 27–51). Springer.
- Damasio, A. (1999). *The feeling of what happens*. Houghton Mifflin Harcourt.
- Davidson, D. (2004). *Problems of rationality*. Clarendon Press.
- Dreyfus, H. (1992). *What computers still Can't do*. MIT Press.
- Dreyfus, S., & Dreyfus, H. (1980). *A five-stage model of the mental activities involved in directed skill acquisition*. California Univ Berkeley Operations Research Center.
- Durkheim, E. ([1895] 1982). *The rules of sociological method*. Free Press.
- Durkheim, E. ([1912] 1995). *The elementary forms of religious life*. The Free Press.
- Durkheim, E. ([1925] 2012). *Moral education*. Courier Corporation.
- Durkheim, E. ([1893] 2014). *The division of labor in society*. Simon and Schuster.
- Easterbrook, J. (1959). The effect of emotion on Cue utilization and the Organization of Behavior. *Psychological Review, 66*(3), 183–201.
- Effler, E. S. (2010). *Laughing saints and righteous heroes*. University of Chicago Press.
- Engman, A., & Cranford, C. (2016). Habit and the body: Lessons for social theories of habit from the experiences of people with physical disabilities. *Sociological Theory, 34*(1), 27–44.
- Evans, J. (2008). Dual-processing accounts of reasoning, judgment, and social cognition. *Annual Review of Psychology, 59*(1), 255–278.
- Firat, R., & McPherson, C. M. (2010). Toward an integrated science of morality. In S. Hitlin & S. Vaisey (Eds.), *Handbook of the sociology of morality* (pp. 361–384). Springer.
- Gallese, V. (2011). Embodied simulation theory: Imagination and narrative. *Neuropsychoanalysis, 13*(2), 196–200.
- Gallese, V., & Lakoff, G. (2005). The Brain's concepts: The role of the sensory-motor system in conceptual knowledge. *Cognitive Neuropsychology, 22*(3–4), 455–479.
- Garfinkel, H. (1967). *Studies in ethnomethodology*. Prentice-Hall.
- Gibson, E. J. (1963). Perceptual learning. *Annual Review of Psychology, 14*, 29–56.
- Gibson, D. (2008). Doing time in space: Line-joining rules and resultant morphologies. *Sociological Forum, 23*, 207–233.
- Gibson, J. (2014). *The ecological approach to visual perception*. Psychology Press.
- Gibson, J., & Crooks, L. (1938). A theoretical field-analysis of automobile-driving. *The American Journal of Psychology, 51*(3), 453–471.
- Gibson, E. J., & Pick, A. (2000). *An ecological approach to perceptual learning and development*. Oxford University Press.
- Giddens, A. (1979). *Central problems in social theory*. University of California Press.
- Goffman, E. (1952). On cooling the mark out; some aspects of adaptation to failure. *Psychiatry, 15*(4), 451–463.
- Goffman, E. (1972). *Relations in public*. Basic Books.
- Goffman, E. (1983). The interaction order. *American Sociological Review, 48*(1), 1.
- Haidt, J. (2012). *The righteous mind*. Knopf Doubleday Publishing Group.
- Haugeland, J. (1998). *Having thought*. Harvard University Press.
- Healy, K. (2010). *Last Best Gifts*. University of Chicago Press.
- Heimer, C. A. (2010). The unstable Alliance of law and morality. In S. Hitlin & S. Vaisey (Eds.), *Handbook of the sociology of morality* (pp. 179–202). Springer.
- Heritage, J. (2013). *Garfinkel and ethnomethodology*. John Wiley & Sons.
- Heyes, C., & Catmur, C. (2022). What happened to Mirror neurons? *Perspectives on Psychological Science, 17*(1), 153–168.
- Hitlin, S., & Vaisey, S. (2010). Back to the future. In *Handbook of the sociology of morality, handbooks of sociology and social research* (pp. 3–14). Springer.
- Hoffman, S. G. (2006). How to punch someone and stay friends: An inductive theory of simulation. *Sociological Theory, 24*(2), 170–193.
- Ignatow, G. (2009a). Culture and embodied cognition: Moral discourses in internet support groups for overeaters. *Social Forces, 88*(2), 643–669.
- Ignatow, G. (2009b). Why the sociology of morality needs Bourdieu's habitus. *Sociological Inquiry, 79*(1), 98–114.
- Ignatow, G. (2010). Morality and mind-body connections. In S. Hitlin & S. Vaisey (Eds.), *Handbook of the sociology of morality* (pp. 411–424). Springer.
- Jefferson, G. (1973). A case of precision timing in ordinary conversation. *Semiotica, 9*(1), 47–96.
- Katz, J. (1999). *How emotions work*. University of Chicago Press.
- Kiley, K., & Vaisey, S. (2020). Measuring stability and change in personal culture using panel data. *American Sociological Review, 85*(3), 477–506.
- Kohlberg, L. (1973). *Moral development*. McGraw-Hill.
- Kohlberg, L., & Hersh, R. (1977). Moral development: A review of the theory. *Theory Into Practice, 16*(2), 53–59.
- Kripke, S. (1982). *Wittgenstein on rules and private language*. Harvard University Press.

- Lamont, M. (1992). *Money, morals, and manners*. University of Chicago Press.
- Lande, B. (2007). Breathing like a soldier: Culture incarnate. *The Sociological Review*, 55, 95–108.
- Laurier, E. (2004). Doing office work on the motorway. *Theory, Culture & Society*, 21(4–5), 261–277.
- Leschziner, V. (2019). Dual-process models in sociology. In *The Oxford handbook of cognitive sociology*. Oxford University Press.
- Leschziner, V., & Brett, G. (2021). Have schemas been good to think with? *Sociological Forum*, 36(S1), 1207–1228.
- Livingston, E. (1987). *Making sense of ethnomethodology*. Taylor & Francis.
- Lizardo, O., Mowry, R., Sepulvado, B., Taylor, M., Stoltz, D., & Wood, M. (2016). What are dual process models? Implications for cultural analysis in sociology. *Sociological*, 34, 287.
- Lizardo, O., Sepulvado, B., Stoltz, D., & Taylor, M. (2020). What can cognitive neuroscience do for cultural sociology? *American Journal of Cultural Sociology*, 8(1), 3–28.
- Luft, A. (2020). Theorizing moral cognition. *Socius*, 6, 2378023120916125.
- Lupton, D. (2002). Road rage: Drivers' understandings and experiences. *Journal of Sociology*, 38(3), 275–290.
- Mackie, J. (1990). *Ethics: Inventing right and wrong*. Penguin Book.
- Martin, J. L. (2001). On the limits of sociological theory. *Philosophy of the Social Sciences*, 31(2), 187–223.
- Martin, J. L., & Lembo, A. (2020). On the other side of values. *American Journal of Sociology*, 126(1), 52–98.
- Marx, K., & Engels, F. ([1845] 1998). *The German ideology*. Prometheus Books.
- Mauss, M. (2002). *The gift*. Routledge.
- McDonnell, E. M., Stoltz, D., & Taylor, M. (2020). Multiple market moralities. *Socio-Economic Review*, 20, 883. <https://doi.org/10.1093/ser/mwaa034>
- McDonnell, T., Stoltz, D., & Taylor, M. (2021). Revision, reclassification, and refrigerators. *Sociological Forum*, 36, 1316. <https://doi.org/10.1111/socf.12769>
- McNeill, W. (1997). *Keeping together in time*. Harvard University Press.
- Merleau-Ponty, M. (1962). *Phenomenology of perception*. Psychology Press.
- Michael, M. (2020). The invisible car: The cultural purification of road rage. In *Car cultures* (pp. 59–80). Routledge.
- Miller, L. (1997). Not just weapons of the weak: Gender harassment as a form of protest for Army men. *Social Psychology Quarterly*, 60(1), 32–51.
- Mills, C. W. (1940). Situated actions and vocabularies of motive. *American Sociological Review*, 5(6), 904–913.
- Molenberghs, P., Cunningham, R., & Mattingley, J. (2012). Brain regions with Mirror properties. *Neuroscience and Biobehavioral Reviews*, 36(1), 341–349.
- Murphy, A. (1998). Hidden transcripts of flight attendant resistance. *Management Communication Quarterly*, 11(4), 499–535.
- Nakamura, J., & Csikszentmihalyi, M. (2014). The concept of flow. In M. Csikszentmihalyi (Ed.), *Flow and the foundations of positive psychology* (pp. 239–263). Springer.
- Nuhrat, Y. (2020). Moralities in mobility: Negotiating moral subjectivities in Istanbul's traffic. *Mobilities*, 15(3), 325–340.
- Pagis, M. (2010). From abstract concepts to experiential knowledge: Embodying enlightenment in a meditation center. *Qualitative Sociology*, 33(4), 469–489.
- Pálsson, G. (1994). Enskilment at Sea. *Man*, 29(4), 901–927.
- Parsons, T. (2013). *The social system*. Routledge.
- Patterson, O. (2018). The mechanisms of cultural reproduction: Explaining the puzzle of persistence. In L. Grindstaff, M. M. Lo, & J. R. Hall (Eds.), *Routledge handbook of cultural sociology* (pp. 139–135). Routledge.
- Pels, D. (1996). Strange standpoints: Or, how to define the situation for situated knowledge. *Telos*, 1996(108), 65–91.
- Pitts-Taylor, V. (2015). A feminist carnal sociology?: Embodiment in sociology, feminism, and naturalized philosophy. *Qualitative Sociology*, 38(1), 19–25.
- Pitts-Taylor, V. (2016). *The Brain's body*. Duke University Press.
- Raja, V., & Anderson, M. (2019). Radical embodied cognitive neuroscience. *Ecological Psychology*, 31(3), 166–181.
- Rawls, A. W. (1987). The interaction order sui generis. *Sociological Theory*, 5(2), 136–149.
- Rawls, A. W. (1989). Language, self, and social order: A reformulation of Goffman and Sacks. *Human Studies*, 12(1/2), 147–172.
- Rawls, A. W. (2010). Social Order as Moral Order. In S. Hitlin & S. Vaisey (Eds.), *Handbook of the sociology of morality* (pp. 95–121). Springer.
- Rosaldo, M. Z. (1984). *Toward an anthropology of self and feeling*. Cambridge University Press.
- Rothe, J. P. (1992). Traffic sociology: Social patterns of risk. *International Journal of Adolescent Medicine and Health*, 5(3–4), 187–198.
- Rozin, P., Lowery, L., Imada, S., & Haidt, J. (1999). The CAD triad hypothesis. *Journal of Personality and Social Psychology*, 76(4), 574–586.
- Sacks, H. (2014). Turn-taking in conversations. In J. Angermuller, D. Maingueneau, & R. Wodak (Eds.), *The discourse studies reader: Main currents in theory and analysis* (pp. 194–293). John Benjamins.
- Savage, I. (2013). Comparing the fatality risks in United States transportation across modes and over time. *Research in Transportation Economics*, 43(1), 9–22.
- Schwartz, B. (1975). *Queuing and waiting*. University of Chicago Press.
- Schwartz, B. (1981). *Vertical classification*. University of Chicago Press.

- Scott, W. R. (2013). *Institutions and organizations*. SAGE Publications.
- Shackleford, B. (1999). Masculinity, hierarchy, and the auto racing fraternity. *Men and Masculinities*, 2(2), 180–196.
- Shweder, R., & Haidt, J. (1993). The future of moral psychology. *Psychological Science*, 4(6), 360–365.
- Simmel, G. (1950). *The sociology of Georg Simmel*. Simon and Schuster.
- Squire, L. R. (1992). Declarative and nondeclarative memory: Multiple brain systems supporting learning and memory. *Journal of Cognitive Neuroscience*, 4(3), 232–243.
- Stoltz, D., & Lizardo, O. (2018). Deliberate trust and intuitive faith: A dual-process model of reliance. *Journal for the Theory of Social Behaviour*, 48(2), 230–250.
- Stoltz, D., & Taylor, M. (2017). Paying with change: The purposeful enunciation of material culture. *Poetics*, 64, 26–39.
- Strauss, C. (1992). Models and motives. In C. S. R. G. D'Andrade (Ed.), *Human motives and cultural models* (pp. 1–21). Cambridge University Press.
- Strauss, C., & Quinn, N. (1997). *A cognitive theory of cultural meaning*. Cambridge University Press.
- Sweet, P. (2020). Who knows? Reflexivity in feminist standpoint theory and Bourdieu. *Gender & Society*, 34(6), 922–950.
- Swidler, A. (1986). Culture in action: Symbols and strategies. *American Sociological Review*, 51(2), 273–286.
- Tavory, I., & Fine, G. A. (2020). Disruption and the theory of the interaction order. *Theory and Society*, 49(3), 365–385.
- Taylor, E. (2014). 'Fight the towers! Or kiss your Car Park goodbye': How often do residents assert car parking rights in Melbourne planning appeals? *Planning Theory & Practice*, 15(3), 328–348.
- Tomasello, M. (2016). *A natural history of human morality*. Harvard University Press.
- Vaisey, S. (2009). Motivation and justification: A dual-process model of culture in action 1. *The American Journal of Sociology*, 114(6), 1675–1715.
- Varela, F., Thompson, E., & Rosch, E. (2017). *The embodied mind*. MIT Press.
- Wacquant, L. (1995). The pugilistic point of view. *Theory and Society*, 24, 489–535.
- Wacquant, L. (2004). *Body & Soul*. Oxford University Press.
- Weber, M. ([1922] 1978). *Economy and society*. University of California Press.
- Wherry, F. (2010). The sacred and the profane in the marketplace. In *Handbook of the sociology of morality* (pp. 147–161). Springer.
- Whiteley, C. H. (2020). On Defining 'moral.'. In *The definition of morality* (pp. 21–25). Routledge.
- Wikström, P. (2010). Explaining crime as moral actions. In S. Hitlin & S. Vaisey (Eds.), *Handbook of the sociology of morality* (pp. 211–239). Springer.
- Winchester, D. (2008). Embodying the faith: Religious practice and the making of a Muslim moral habitus. *Social Forces*, 86(4), 1753–1780.
- Winchester, D. (2016). A hunger for god: Embodied metaphor as cultural cognition in action. *Social Forces*, 95(2), 585–606.
- Winchester, D., & Green, K. (2019). Talking your self into it: How and when accounts shape motivation for action. *Sociological Theory*, 37(3), 257–281.
- Winchester, D., & Pagis, M. (2021). Sensing the sacred: Religious experience, somatic inversions, and the religious education of attention. *Sociology of Religion*, 83(1), 12–35.
- Witt, J., & Proffitt, D. (2008). Action-specific influences on distance perception. *Journal of Experimental Psychology*, 34(6), 1479–1492.
- Wittgenstein, L. (1953). *Philosophical investigations*. Macmillan.
- Wood, M. L., Stoltz, D., Van Ness, J., & Taylor, M. (2018). Schemas and frames. *Sociological Theory*, 36(3), 244–261.
- Yanko, M., & Spalek, T. (2013). Route familiarity breeds inattention: A driving simulator study. *Accident*, 57, 80–86.

Dustin Stoltz (PhD, University of Notre Dame) is an Assistant Professor of Sociology and Cognitive Science at Lehigh University. His research focuses on the intersection of cultural change, cognition, and systems of stratification as well as methodological work in computational text analysis. His work appears in *Sociology Theory*, *Poetics*, and the *Journal of Computational Social Science*, among others.

Michael Wood (PhD, University of Notre Dame) is an Assistant Professor of Sociology at Brigham Young University. His research focuses on conceptual and methodological development in the fields of culture and cognition, religion, and computational social science. Michael's work appears in *Sociology Theory*, *Socius*, and *Social Science Computer Review*, among others.