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Our Bodies, Ourselves: Biology, Psychology, and the Strong Argument for Culture

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Abstract

Since Durkheim, explanations from biology and psychology have been treated as antithetical to sociological and cultural analysis. However, since the 1990s research in several fields—including neurophysiology, the study of emotions, cognitive linguistics, sociolinguistics, and cultural psychology—has taken a pronounced cultural turn. In this paper I argue that research in these areas is converging on a picture of the relations between the body, cognition, and language in which bodily and psychological processes both shape and are also altered by culture. These fields offer sociologists fresh insights into core concepts, including *cultural repertoires*, the distinction between the *sacred and the profane*, and the role of *emotions in social movements*.

“It is impossible for a society to be dominated by technical rationality because the mental structures of humankind cannot be radically historicized; in crucial respects, they are unchanging.”

--Jeffrey Alexander, 1992: 305

In demarcating the domain of sociology, Durkheim strove to exclude competing sciences that admitted a strong biological basis, including but not limited to biology and psychology (see Gane 1988). For most of the twentieth century, biology and psychology remained very much ‘the other’ of sociology (Fuller 2000). Yet this position is becoming increasingly untenable. In recent years bodily, neural, and emotional phenomena have emerged as topics of careful social science research. Culture often looms large in studies of bodily and emotional phenomena: social scientists have shown how bodies, and the ways people understand and experience their bodies, are molded by culture and history (Turner 1984; Freund 1988; Schilling 1993; Crossley 2001; Elias 2000; Hochschild 1985). Yet the reverse argument, that the body and emotions as such are relevant to *cultural theory*, is mostly absent from sociology. While we have come to recognize that cultures construct bodies, we scarcely imagine that our bodies and emotions play an active role in the construction of culture. This is true of the social sciences generally, beset as they are by a mind/body dualism inherited from Cartesian philosophy (Freund 1988). And it is especially the case for sociology, which has since Durkheim prioritized the mind, culture, and society at the expense of the body (Janssen and Verheggen 1997). Thus within sociology, living, breathing human beings have more often than not appeared as curiously “disembodied” (Freund 1988: 839). This overemphasis on mental life at the expense of the physical extends to cultural studies and cultural sociology, particularly to studies in which culture is conceptualized in terms of repertoires, i.e. collections of symbols and gestures, or else in terms of tacit rules and values (Turner 2002).

This trend is unfortunate and awkward because, as Janssen and Verheggen (1997) argue, in the ‘symbol theory’ Durkheim developed in *The Elementary Forms of the Religious Life* and elsewhere, culture is understood to have a “double nature.” It is “natural as well as human and material as well as moral” (1995 [1912]: 224; qtd. in Janssen and Verheggen 1997: 294). While Durkheim stressed that the meaning of an object is not determined a priori by the intrinsic propoerties of the object, there was a nonrelativist element in his sociology too (Janssen and Verheggen 1997: 296). Durkheim saw a “dualism of human nature” (1960 [1914]), a *homo duplex* view in which mind and matter were mutually constitutive. But reason and cognition could never overcome the “lower” instincts and emotions (see Mestrovic 1991; 1993). Thus while Durkheim stressed that things that bear meaning do not possess this meaning intrinsically, he made exceptions for the human body as the bearer of sacred meanings. In the *Elementary Forms* he argued that blood, hair, and bodily fat were treated as intrinsically sacred. In other writings, he argued that the human body is *the* ultimate substratum of society (see Janssen and Verheggen 1997: 298). The socially and culturally embedded body constitutes the cultural symbol par excellence, “the person.”

Despite the renown of some sociological and historical writing on the body (Elias 1994; Foucault 1988, 1984; Bourdieu 2001, 1990), in cultural sociology today, Alexander’s neo-Durkheimian cultural analysis is one of the only treatments that takes seriously the “nonrelativist” element in Durkheim’s symbol theory (Janssen and Verheggen 1997: 296), the “lower” instincts and emotions we all share. Having defined culture as “an organized set of meaningfully understood symbolic patterns,” Alexander (1992: 295) argues that these patterns are “indelibly penetrated by the nonrational,” by “deeply irrational systems of psychological defense,” and by “deep emotional impulses” (305). Alexander’s “strong program” (a term from science studies: Bloor 1976; Latour and Woolgar 1986) of cultural sociology builds on a transgressive mini-tradition within sociology. Durkheim’s student Robert Hertz (1960), with members of the Parisian *Collège de Sociologie* (which folded after only two years), developed a sociology which incorporated the non-rational, erotic, existential, evil and unconscious (see Botting and Wilson 1997; Caillois 1959).

Yet like Durkheim, Hertz, Bataille, and Caillois, Alexander never tries to “look into the black box of the human mind” or to “specify the reward circuitry that might lie at the basis of contrasts such as the sacred and the profane” (Hammond 2003: 359-60). Yet in recent decades, in several subfields of biology, psychology, and related areas, researchers are doing exactly this. While no single study from these subdisciplinary areas promises to revolutionize cultural sociology, taken together they support and clarify a *homo duplex* understanding of human behavior in which the “lower part” (instincts and emotions) is of central significance. Thus in this paper, I do not attempt to integrate major trends in mainstream biology or psychology with sociology (see Fuller [2000] for a discussion of why this would not work). Instead, I bring together research programs from a number of subfields of biology, psychology, and related fields. In different ways, these research programs all take culture as their focus. More than sociologists probably recognize, research in these areas both takes culture seriously and bears on contemporary cultural sociology. Instead of arguing over the primacy of nature or nurture, through

greater awareness of current research on neurophysiology, emotions, and cognition, we can specify how these elements interact, and in so doing enrich sociological treatments of culture.

Cultural Piggybacking

A view of culture as a system of meaningful symbols penetrated by irrational, bodily, and emotional processes is this paper's starting point. As I will show, it is a view that finds support in contemporary biology, neurophysiology, cultural psychology, and cognitive linguistics, and from the "corporeal turn" in theoretical linguistics. At the same time, these subdisciplinary areas have much to offer cultural sociology. Specifically, insights from these subfields allow us to incorporate the body and emotions into a comprehensive theoretical understanding of cultural influence. The central tenets of the bodily approach to culture that I develop in this paper are that language is dependent or "parasitic" (Ruthrof 2000) on cognition, and both cognition and language in turn "piggyback" on the body and emotions. Culture can be thought of as socially shaped associations between language, cognition, and the body and emotions.

"Piggybacking" is a term used in neurophysiology to describe how evolution, in giving rise to new species and capacities, prefers extensions, elaborations, and alterations of a biological heritage rather than dramatic mutations (Maryanski and Turner 1992: 57). New species capacities, like the capacity for speech, writing, and culture and religion, do not have their own specific biological or neural subsystems. Instead, they "piggyback" on processes established before the origin of our species and expanded in our evolutionary formation (Hammond 2003: 360). In so far as sociologists are interested in the neurophysiological bases of culture, it is useful to learn how "higher" human capacities, for cognition, language, and reason, piggyback on "lower" instincts and emotions.

The Emotional Dog and its Rational Tail.

In psychology, "intuitionist" models of cognition and reasoning are increasingly prominent. Intuitionist models hark back to Freud's (1976) distinction between primary process (older animal desires) and secondary process (realistic thinking aimed at satisfying the older animal drives), and concur with Freud's point that primary processes are, in fact, primary. In the history of academic psychology this view has waxed (in Freudian analysis) and waned (since the "cognitive revolution" of the 1970s), but seems to be on the rise again, in psychology and related disciplines.

In recent years, Damasio (1994, 1999) has been perhaps the foremost advocate of a corporeal, intuitionist understanding of human reason. In *Descartes' Error* (1994), Damasio, a practicing neuropsychologist whose clinical work is with severely brain-damaged patients, explored the "neural underpinnings of reason." He argued that humans' capacity for reason is dependent on bodily and emotional processes, a product of the cooperation of both "high-level" and "low-level" brain centers, from the prefrontal cortices to the hypothalamus and brain stem:

> lower levels in the neural edifice of reason are the same ones that regulate the processing of emotions and feelings. These lower levels maintain direct and mutual relations with virtually every bodily organ, thus placing the body directly within the chain of operations that generate the highest reaches of reasoning, decision making, and, by extension, social behavior and creativity (xiii)

Damasio's argument is that nature has built the apparatus of human rationality not just "on top of the apparatus of biological regulation but also *from* in and *with* it" (128), that "high reason" piggybacks on the "low brain." The body *per se* plays a role as well, as the bodily organism not only shapes reasoning through processes of emotional association ("somatic markers") and motivation, but through a cognitive process as well, where the body is used as the "ground reference for the constructions we make of the world around us" (xvi; see Lakoff and Johnson 1999; more on this point below).

Cultural psychologists Jonathan Haidt, Paul Rozin and their colleagues have picked up on this argument, and have shown how lay and scholarly rationalist theories of *moral reasoning* sharply distinguish between the mind and the body, privilege the mind over the body, and are for these reasons faulty (e.g. Haidt et al. 1993). The evidence that emotion and intuition generally precede reasoning has been accruing for several years, and is by now persuasive. Haidt (2001) provides a useful review of the empirical psychological literature, which includes several studies showing that people are quick to make moral condemnations of culturally aberrant behaviors, from eating one's dead pet to recreational drug use, yet struggle to find supporting reasons for their condemnations (Haidt, Koller, and Dias 1993; Haidt and Hersh 2001). When cross-examined, participants often drop their post-hoc reasons for their moral judgments, yet do not change their minds. Instead, they are "morally dumbfounded," that is, they have strong feelings that an action is wrong, and are shocked to find that they cannot find reasons to support their feelings (Haidt 2002). From these and other findings, Haidt

and his colleagues conclude that in the case of moral decision-making, intuitions, socially shaped, are the primary process, while abstract reasoning is secondary and generally post hoc. Thus it is the "emotional dog" that wags its "rational tail," and not the other way around (Haidt 2002).

The Corporeal Turn in Linguistics

> For language to be meaningful, members of a speech community must be able to share, to a high degree, the way in which language and nonverbal readings are to be associated with one another (Ruthrof 2000)

As a counterbalance to the "linguistic turn" in philosophy in the twentieth century, susceptible as this turn has been to ensnaring itself in a "hermeneutical circle" in which nothing is truly explanatory and everything is culture-dependent (Wierzbicka and Harkins 2001; Taylor 1979), Ruthrof (2000, 1997) has argued that the human body lies at the base of *all* language. His argument is that empirical and theoretical studies in cognitive linguistics and cognitive rhetoric (some of which are reviewed below) contribute to a robust theory of meaning, a *pragmatic* theory of meaning. Parting ways with much of modern linguistics, Ruthrof suggests that human language is based not on principal and logos, on a highly abstract and formal system, but has a kind of corporeality. Spoken and written language is itself "no more than a syntactic grid of empty sound schemata which does not mean anything by itself unless it is activated by nonverbal signs" (Ruthrof 2000: 3). Thus verbal signs are "parasitic" on nonverbal experience (they piggyback), and the body is present in discourse in the form of nonlinguistic signs: as olfactory, tactile, aural, visual, gustatory, and many other subtle, nonverbal readings of the world. The association of linguistic signs and nonverbal experience occurs under the guidance of a linguistic community, of a "form of life" (Wittgenstein 2001). Importantly, for Ruthrof, nonverbal signs activate *all* language, including abstract language and reasoning. The historical evolution of signs is toward abstraction, from body-dependent to increasingly body-independent signs (Ruthrof 2000: 88-95; Sweetser 1990), but even the most abstract sign systems, for example mathematical systems (Lakoff and Núñez 2000), are etymologically dependent on nonverbal experience.

Ruthrof's corporeal theory of meaning shares one of its central tenets with contemporary cognitive linguistics and cognitive rhetoric: that the body shapes language not only directly, through the impact of emotions on reason, but also through cognition as an intermediary. Damasio (1994) recognized this when he wrote that the body is used as the "ground reference for the constructions we make of the world around us" (1994: xvi). These mental "constructions" linking the body to language are the topic of study of much, but not all, of cognitive science and its subspecies, cognitive linguistics and cognitive rhetoric (Wierzbicka 2001: 19), and are variously referred to as cultural models, conceptual primitives, semantic primitives, and conceptual prototypes (cf. Gibbs 1994; Holland and Quinn 1987; Lakoff and Johnson 1999). Cultural models (the term I stick with here because it seems to be the most widely used) consist of small numbers of conceptual objects and their relations to each other (D"Andrade 1987). These models shape reasoning (Gentner and Gentner 1983) and language generally (Lakoff and Johnson 1999). Cultural models are generally thought to take one of two forms: proposition-schemas, which specify concepts and the relations which hold among them (D"Andrade 1987), and image-schemas, which are gestalt-like just as visual images are, but are more schematic than what we ordinarily think of as visual imagery. Also, image-schemas contain emotional and physical information of all kinds (Lakoff and Kövecses 1987). Examples include folk image-schemas of the "flow" of electricity (Gentner and Gentner 1983), of the operation of home heating systems (Kempton 1987), and of the greenhouse effect and global warming (Kempton et al. 1995), among others (see Kempton and Lave 1983 for an early review; for "convergent evidence" of the existence of schemas, see Lakoff and Johnson 1999: 81-87).

Cultural models are instantiated primarily, but not solely (e.g. McNeill 1992; Wilbur 1987), through metaphor, which is ubiquitous in human languages (Lakoff and Johnson 1999; Sweetser 1990; Fernandez 1991; Gibbs 1994). Metaphors are often, but not always, "embodied." That is, they are structured by projections based on the human body, a process known as "phenomenological embodiment" (Lakoff and Johnson 1999: 46). These bodily projections include pushing, pulling, supporting, balance, straight-curved, near-far, front-back, and high-low (Lakoff 1987), all of which provide phenomenological bases of metaphors in most languages, including sign language (Wilbur 1987).

All of the above suggests that there are, putting it roughly, both direct and indirect paths of influence from the body to language. The first, more direct path is between body and "low brain" on the one side, and "high brain" on the other, and includes a set of complex neural interdependencies between the two (Damasio 1994, 1999). The second path of influence runs from the body through cognition to language. Embodied cognition, as discussed by Lakoff and Johnson (1999) and their colleagues, links the body to cognition; metaphor links cognition to language.

The Cultural Construction of Emotions

The studies reviewed above place the body and emotions squarely at the root of the human capacity for culture. Yet bodily processes not only shape culture; they are, of course, shaped by culture too. Recent studies, from some of the same areas discussed above, point to sociologically interesting ways culture informs our emotions and our bodies.

As sociologists have argued for at least several decades (Avrill 1980; Kemper 1978, 1987), emotions not only shape cultural and linguistic practices (like practical and moral reasoning), but are shaped by culture as well. The term "emotion" is itself an Anglo-American cultural category, one that translates only with great awkwardness into other languages (Wierzbicka 1999). There are many groups of people in the world who neither recognize such a category nor have a word for it (Wierzbicka 1999). Significant differences in the meanings of the English word *emotion*, the German *Gefühl*, the French *sentiment*, and so on, hint at the intricacy of the interrelations of emotion, language, and culture (Russell 1991). One approach to understanding these interrelations is to posit the existence of universal emotions, identical across cultures and over the course of human history. Since the 1970s, psychologists have reported that there are at least six basic emotions and associated facial expressions that are recognized across cultures. These are happiness, sadness, anger, fear, disgust, and surprise (Ekman and Friesen 1971; Ekman, Sorenson, and Friesen 1969; Izard 1977; Boucher and Carlson 1980; Fridlund et al. 1987). However, in recent years this universalistic view has seen substantial revision.

Since at least Benedict's famous 1946 study of Japanese *haji*, and her contrast between *haji* and western notions of shame and guilt, there has been some scholarly recognition of links between cultural identity and emotions identified by particular words. Naturally, *haji* is far from being the only culturally specific "emotion." The Japanese psychiatrist Doi (1981: 169) has written extensively on the Japanese feeling of *amae*, which he views as central to personality structure and social relations in Japanese culture. *Amae*, practically untranslatable in English, has been discussed by various writers in terms of affection, love, and dependency, but is clearly not equivalent to any of these English words. The German A*ngst* is another prime example, discussed at length by Wierzbicka (1999). *Angst* is a peculiarly German concept meaning something like the English *fear*, although the German word closest to *fear* is *Furcht*. *Angst* is more like a "state," like depression, and according to Nuss (1993: 193), a state of *Angst* was widespread in Germany in the 1970s: "It was an epoch when millions of Germans would say simply 'Ich habe Angst,' without even trying to specify the nature and cause of this *Angst*."

A fourth well-studied example is the Oriya Hindu word *lajya*, a feeling associated with a facial expression of biting the tongue (Menon and Shweder 1994; Parish 1991). The English *shame* probably comes closest in meaning to *lajya*, but *lajya* is different because it references an iconic representation of the Great Goddess Mother of Hinduism, variously referred to in local South Asian discourse as Kali, Devi, Ma, Parvati, Durga, Chandi, and numerous other appellations. *Lajya* also references an intricate narrative involving Kali (Menon and Shweder 1994: 244-47). *Lajya* also differs from the contemporary meaning of the English *shame* because it is far less negative:

> To have a sense of *lajya* is to be civilized; to know one's rightful place in society; to conduct oneself in a becoming manner; to be conscious of one's duties and responsibilities; to persevere in the performance of social role obligations; to be shy, modest, and deferential and not encroach on the prerogatives of others; and to remain silent or lower one's eyes in the presence of social superiors. *Lajya* is something that one shows or puts on display, just as one might show gratitude or loyalty through various forms of public presentation. Like gratitude or loyalty, *lajya*…is judged to be a very good thing (Menon and Shweder 1994: 277)

Examples like *lajya*, *Angst*, *amae*, and *haji* demonstrate the power of culture to bind emotional states with individual and social identities (for examples from Ghana, see Geurts 2002). Of course, at their roots some physiological states associated with specific emotions may be more-or-less universal—although after years of emprical research, there is little consensus on how many "basic" emotions exist, or on just which emotions are truly universal (Haidt and Keltner 1999). Nonetheless, we can safely implicate culture as a significant factor in the etiology of emotions.

To summarize a bit, above I reviewed arguments that the body and emotions form the proverbial "base," language the "superstructure" (Frank 1990: 159) of *homo duplex*. *Homo duplex*'s lower pole includes both sensorimotor experience and feelings. Sensorimotor experience refers to the phenomenological experience of the five humans senses and of living and moving in physical space. Sensorimotor experience and feeling each shape culture, and are in turn shaped by culture, in several ways. Another path of influence ties subjective bodily experiences to cognition to language. Cognitive models are based on bodily projections (Lakoff and Johnson

1999). These are patterned on elemental human subjective experiences: up-down, in-out, back-front, and so on. These models in turn shape language through metaphor. Also, complex neural interdependencies work to link language, cognition, and emotions (Damasio 1994 1999). Finally, cultures shape feelings—if not feelings' biological roots, then certainly their expression and meaning. While there are surely many more explicable relations between the body, cognition, and culture than those reviewed here, all of the above suffice to show some ways in which our bodies shape our language and culture, and in which language and culture in turn shape our feelings and our experiences of our bodies.

Research Implications

What can a more biologically aware cultural analysis contribute to the social sciences today? Among other potential contributions, it allows us to recast one of contemporary cultural sociology's main concepts, that of a *cultural repertoire*. It also provide fresh insights into Durkheim's distinction between the *sacred and the profane*. Finally, a greater awareness of reasearch from biology, psychology, and related areas allows us to better integrate emotions and culture in the study of *social movements*.

Cultural repertoires and toolkits

Since the late 1980s, an action- or practice-oriented vision of culture has gained prominence in the social sciences. Many cultural researchers have come to think of culture as a "toolkit" (Swidler 1986) or "repertoire" (Lamont 1992; Tilly 1995). What these concepts share is an underlying view of culture as fragmented, as a "collection of stuff that is heterogeneous in content and function" (DiMaggio 1997). In this view of culture as a collection of habits, skills, and styles, individuals are believed to actively select cultural materials to suit their individual purposes, to construct "strategies of action" (Swidler 1986) attuned to the social situations in which they find themselves (DiMaggio 1997).

As a guiding trope for cultural scholarship, the repertoire idea has been a significant improvement over essentialist models of national or regional character (Inkeles 1979) or of world "civilizations" (Huntington 1996). In contrast to these models, repertoire models allow for a focus on intranational (Lamont 1992) and individual-level (Swidler 1986) variations in social and political attitudes that tend to be obscured when culture is conceptualized in terms of monolithic civilizations or modal personality traits. Repertoire models also have an advantage over civilizational models in that they are much better at explaining cultural change (Swidler 1986).

Yet like most cultural analysis, and most social science, repertoire models of culture tend to elide the body and emotions. In terms of the more corporeal understanding of culture presented above, this is a significant omission, because the body and emotions are seen to lie at the root of culture. Thus cultural repertoires, toolkits and the like are prime examples of "secondary process" (Freud 1976), rooted in and penetrated by "primary" processes of the body and emotions. Severing culture from its bodily base may be a theoretically elegant move, but it damages our understanding of culture as it is actually experienced. For example, much of the sociological work on national "repertoires of evaluation" has sought to explain citizens' attitudes on contested social issues (e.g. Lamont and Thévenot 2000). What a bodily cultural sociology adds to these kinds of studies is a way to understand how and why political issues come to be thought of as moral issues (Rose 1999; Lakoff 1996; Lamont 1992), rather than as pragmatic or economic ones. A recent *Atlantic Monthly* article makes clear that, in the United States at least, people no longer "vote their pocketbooks," and elections "no longer pit the party of the working class against the party of Wall street." Instead, the best predictors of political attitudes are sexual and moral values. Elections now "pit voters who believe in a fixed and universal morality against those who see moral issues, especially sexual ones, as elastic and subject to personal choice" (Edsall 2003).

> Early in the 1996 election campaign, Dick Morris and Mark Penn, two of Bill Clinton's advisers, discovered a polling technique that proved to be one of the best ways of determining whether a voter was more likely to choose Clinton or Bob Dole for President. Respondents were asked five questions, four of which tested attitudes toward sex: Do you believe homosexuality is morally wrong? Do you ever personally look at pornography? Would you look down on someone who had an affair while married? Do you believe sex before marriage is morally wrong?…According to Morris and Penn, these questions were better vote predictors—and better indicators of partisan inclination—than anything else except party affiliation or the race of the voter (black voters are overwhelmingly Democratic)

In the case of American electoral politics, the source of political attitudes is not economic, but nor is it simply a free floating national repertoire of beliefs and standards of evaluation. If attitudes are the superstructure, if you will, the base is sexual and bodily. Social scientists increasingly recognize this. For example, in one of the psychology studies cited above, Haidt and Hersh (2001) investigated the social and sexual attitudes of liberal and conservative American college students, along with the students' emotional responses to

questions about sex and morality. Haidt and Hersh found that for both liberals and conservatives, moral judgments were best predicted by emotional reactions. And conservatives were more likely than liberals to moralize sexual behavior, especially homosexual behavior.

These kinds of findings are not necessarily anathema to conceiving culture as a repertoire or toolkit. However, these findings do fit well with a bodily approach to culture, an approach that puts the body and emotions at the root of cultural practices. Such an approach provides an important corrective to our understanding of how people enact culture. When people download ideas and ways of evaluating others from the cultural repertoires available to them, this downloading is a largely post-hoc process, driven by intuition, emotion, and deeply held ideas about the body.

The sacred and the profane

Ever since Durkheim excluded consideration of individual psychological and physiological states from sociological analysis, sociologists, particularly those writing in the Durkheimian tradition, have been slow to integrate findings from psychology, neuroscience, and related disciplines into their research. Durkheim's famous distinction between the sacred and the profane, while it continues to prove valuable for cultural studies (Hunt 1990; Alexander 1990; Ignatow 2003), suffers from this refusal on the part of sociologists to consider psychological and physiological factors in experiences of the sacred and of the profane. Because today we know more about relations among the body, feeling, thought, and language than did Durkheim, we can now begin to explore, in at least a tentative way, the bodily bases of the sacred and the profane.

Why, in evolutionary terms, did humans develop religion and the distinction between the sacred and the profane? Hammond (2003) develops a remarkable account of the advantages that religious ritual brought to early humans. He argues, in brief, that communal rituals create indirect ties between individuals. Individuals who experience direct personal ties are apt to become bored; their brains are wired such that over time they cease to be emotionally aroused by other individuals. Individuals overcome this by creating more direct ties, but these require significant investments of time and emotional energy. Thus at some point in human evolution, there was "a selective advantage to using an indirect approach that could produce an even greater number of reliable ties without as much in the way of further increases in affective arousal capacities…Indirect ties between individuals through a common, emotionally laden third point, such as a social structure, can produce a greater number of reliable ties with a lesser increase in affective capacities" (Hammond 2003: 365-6). For Hammond, Durkheim's emphasis on totemic systems in early religion is a good example of this process. Totemic systems and rituals tie large numbers of individuals together indirectly, and our bodies, because of our evolutionary heritage, "leap at the opportunities" for arousal these systems and rituals present (368).

Where Durkheim discussed subjective experiences associated with the sacred, he leaned heavily on the idea of "collective effervescence." In keeping with his rejection of subjective states as a proper subject matter for sociology, in his later writings he did not tie collective effervescence to any particular emotion or feeling. Instead, for Durkheim what matters in the notion of collective effervescence is not the nature of the "effervescence" itself, but only that it is collective. Collective effervescence is the "very type of sacred thing" (1965/1915: 140), and for it to occur, all that is necessary "is that men are assembled, that sentiments are felt in common and expressed in common acts; but the particular nature of these sentiments and acts is something relatively secondary and contingent" (1965/1915: 431-2). Durkheim's position then was that the nature of the sentiments involved in collective effervescence are of only secondary importance, and that practically any sentiment is made sacred if it is shared within a group. On close examination, however, this position seems far too broad. If the members of a group are annoyed, does their collective annoyance become sacred? If they are disappointed, is their disappointment rendered sacred? If they are bored, is their ennui sacred?

What allowed the idea of collective effervescence to make sense to Durkheim was that, despite his assertions to the contrary, he assumed that not just any sentiment could be made sacred. The idea of collective effervescence contained psychological assumptions that Durkheim did not acknowledge, but that are now fairly clear (Pickering 1984: 382-395). Durkheim relied on notions of crowd psychology from Gustave LeBon and Gabriel Tarde, and even on Mesmerism (Lindholm 1992), none of which is now taken seriously in sociology or psychology.

Contemporary research in neurophysiology, biology, and psychology, while incomplete, can begin to illuminate the bodily bases of experiences of the sacred. Hammond (2003: 360-61) reviews some of this work. Hormones from subcortical areas (the "low brain") like the hypothalamus, including vasopressin and oxytocin, have been demonstrated to be crucial to some aspects of both partner loyalty and parenting behavior (Konner 2002: 325-26), and of religious experiences (MacLean, Walton, and Wenneberg 1994). Similarly, studies have shown that arousers involving strong personal bonds and arousers involving religious experiences stimulate heightened activity in the hypothalamus, the amygdala, and the anterior cingulate (Newberg, d'Aquilli, and

Rause 2001). Some religious stimuli have been shown to have a dampening effect on the posterior superior parietal area, associated with maintaining a physical sense of the self as a separate object in the world (Newberg, d'Aquilli, and Rause 2001).

Psychology research on feelings of moral "elevation" is also useful here. Moral elevation or "uplift" is described by Haidt (2001) as a "warm, open feeling" related to emotions of awe, gratitude, and admiration. It is a response to "moral beauty" that motivates people to behave more virtuously themselves. In a series of experiments, when asked to describe specific times they had seen "a manifestation of humanity's 'higher' or 'better' nature," participants reported physical feelings in their chests, especially warm, pleasant, and "tingling" feelings (Haidt et al. 2001). Although researchers have not pinpointed exactly what happens in the chest when one experiences elevation (Haidt 2000), it seems likely that the vagus nerve is at work, causing a variety of changes in the heart and lungs (Porges 1995).

Ideas of purity and contagion are another area of overlap between contemporary psychology and cultural sociology. For Durkheim, purity and contagion were wrapped up with the sacred. Sacred objects, as described in the *Elementary Forms*, are thought about by members of a society in terms of laws of "magical thinking," what Frazer and Mauss called "contagion" and "similarity" (Frazer 1922). The law of contagion could be summed up by the formula "Once in contact, always in contact." Contact with an object considered impure will transmit the impurity to the person, who cannot be rid of it without recourse to purification rituals. The law of similarity is based on the principle that "image equals object." For example, needles used to "torture" an image of one's enemy are supposed to inflict similar suffering on the real person. The psychologists Paul Rozin and Carol Nemeroff have been studying purity and contagion since the 1980s. They have found ample evidence of these phenomena in contemporary culture, and have explained much about their biological and evolutionary background (cf. Rozin and Nemeroff 1990). While the literature on purity and contagion is far too extensive to summarize here, studies in this area can and should inform sociological perspectives on the sacred and the profane, particularly perspectives that take the body and feelings seriously.

Disgust and the profane. Durkheim's approach to the idea of the profane was somewhat muddled, in part due to difficulties in translating the French *sacré*, which denotes both holiness and inviolability, on the one hand, and "damned, cursed, profane, bloody" on the other (Pickering 1984: 125; also Marett 1914: 110). He never defined the profane in the positive way he did the sacred (Pickering 1984: 133; Stanner 1967), and often treated it as a residual category of the sacred. While Durkheim's approach may be clarified by adding a third term, the *mundane* (or the routine, ordinary, everyday) (Stanner 1967; Caillois 1959), there is broad agreement that he gave the profane short shrift. However, if we proceed from the assumption that the experience of the profane is different from and far more aversive than the experience of the mundane, we still lack a vocabulary to describe what the profane feels like. Psychological studies of disgust and contagion provide some answers. Like sacredness, the profane is contagious (Rozin and Nemeroff 1990). It is associated with disgust emotions, which are now fairly well understood in terms of their biological functioning and evolutionary background (Haidt et al. 1997). It is important to note that associations between profane, morally offensive acts and emotions are at least partially contingent on culture. Rozin, Lowery, Imada, and Haidt (1999) have shown that different cultures emphasize different "moral domains," of autonomy, community, and divinity (Shweder et al. 1998), and that specific emotions are associated with transgressions in each domain: anger with autonomy, contempt with community, and disgust with divinity. Again, the picture that emerges from these studies is consistent with that espoused by a bodily cultural sociology: the body and emotions powerfully shape beliefs and culture, and cultures in turn shape emotions and their expression.

Up-down, high-low, elevation-degration. Contrary to the way the sacred and the profane are often conceptualized, what the findings presented in this section suggest is that the sacred and the profane are neither the inverse of one another nor do they imply one another. Instead, they each have distinct bodily bases. The sacred seems to be associated with experiences of elevation and contagion, while the profane is associated with experiences of disgust, contempt, anger, and contagion. What tends to bind the sacred to the profane is not that one implies the absence of the other, but that they are often organized in culture as a binary relation. In many instances this relation is based on a bodily projection (Lakoff and Johnson 1999) of up versus down, high versus low, elevation versus degradation. This mapping of sacred/profane onto high/low has intuitive appeal, as it conforms to the universal human experience of dangerous, dirty, and primitive things residing on or close to the ground (see Lakoff 1987). Dumont's study of the Indian caste system (1980/1966) provides the best known example of such a mapping, writ large, but his finding is corroborated by Iteanu's studies of the Orokaiva society of Papua New Guinea (Iteanu 1990), *inter alia*.

The mapping of feelings associated with the sacred and the profane onto ideas of high and low, up and down, and so forth does not seem to hold for Alexander and Smith's important idea of a "democratic code."

Alexander and Smith (1993) argue that the discourse of American civil society is structured around a binary relation of "democratic" versus "non-democratic," a relation that is charged with the religious symbology of the sacred and the profane. These cultural codes structure the discursive construction of actors, social relations, and institutions in American society. In historical perspective, however, this rather egalitarian cultural code is something of an anomaly, because here the sacred is associated not with ideals of loftiness and refinement (e.g. Sewell 1980), but rather with activity, sanity, reason, trust, citizenship, equality, and the law. The profane is not associated with degradation, but with passivity, dependence, irrationality, suspicion, deceit, and hierarchy (Alexander and Smith 1993). More often, it seems, where ideas of the sacred and the profane have been heavily institutionalized, they have been mapped onto ideas of high and low, elevation and degradation. But as Alexander and Smith have shown, this need not be the case.

In this section I have tried to show how notions of the sacred, the profane, and collective effervescence can be strengthened by doing what Durkheim refused to do: give careful consideration to the bodily and emotional states associated with each. Here I have attempted to do just that, albeit it in a provisional way. Social scientists writing in the Durkheimian tradition will probably never need nor want to strap EKG meters to religious revivalists or take MRI's of the brains of aborigines as they perform seasonal rituals. Nonetheless, we can enrich our understanding of the distinction between the sacred and the profane by taking research on the psychology of emotions seriously. In so doing, we can enrich the vocabulary we use to describe emotions associated with the sacred and the profane, for example by incorporating ideas of purity, pollution, elevation, degradation, disgust, contempt, and anger. Finally, a biologically aware cultural analysis gives us a sense of how bodily projections and emotions will tend to be associated by culture and in culture, and that diverse cultures will tend to make similar associations, because these associations are based in part on the universal morphology of the human body. But these associations are, ultimately, contingent and constructed. Understanding just how these associations are constructed could contribute much to cultural and social theory.

Social movements

The study of social movements is of great importance to bodily cultural analysis, because it is in social movements that we should be able to discern the creation of new cultural associations between the body, feeling, thought, and language, and to recognize social impacts of these associations. The reverse is true as well, and a body-aware cultural sociology has much to offer the study of social protest and collective behavior. Such an approach can help to integrate, theoretically, research on culture and social movements with research on emotions and social movements. My specific argument here is that while some sociologists have focused on cultural dimensions of social movements (e.g. Johnston and Klandermans 1995), and others are bringing emotions back into social movement scholarship (Goodwin et al. 2001; Jasper 1997), these two approaches need greater theoretical synthesis. When we turn the theoretical lens of each on the other, that is when we look at emotions through culture and culture through emotions and the body, the limitations and promise of each perspective appear in greater relief. As it stands, however, the two perspectives are quite far apart. Social scientists have theorized and studied relationships between emotions and social and political structures (e.g. Barbalet 1998; Kemper 1990a; Scheff and Retzinger 1991). There have also been notable studies, relevant to the sociology of social movements, of the relations between culture and social, political, and economic structures (e.g. Berezin 1997). What's missing from the contemporary scene is a more robust understanding of the relations between culture and emotions. In the current state of social movement scholarship, while relations between culture and social and political structures are of major interest to sociologists, relations between social structures and emotions are less frequently studied, although research by Kemper and his colleagues, *inter alia*, on the emotional effects of social stratification, is obviously relevant (Kemper 1978, 1987, 1990b). By comparison, the relations between emotions and culture seems poorly understood. To what degree, and how, does culture shape feelings and their expression? How do the body and emotions shape culture? In my view, insufficient attention to these questions on the part of students of social movements leads to at least two problems.

The first problem is that while many sociologists contend that culture "constructs" the body and feelings, they do not imagine that the opposite would hold true. But as we have seen above, research from the neurosciences, cognitive science, psychology, and related fields suggests that in fact the body and emotions shape culture in fundamental ways, and that the body and emotions are at all times a part of mental life (Damasio 1994, 1999). Emotion does not intrude on mental life so much as it is part of its basic structure. Yet social movements scholars regularly conceive of emotions as impinging on thought, rather than as fundamental to it. For example, Aminzade and McAdam (2001: 18), in a review of the literature on emotions and social movements, cite with approval Rosaldo's (1984: 143) definition of emotions as "embodied thoughts, thoughts seeped with the apprehension that 'I am involved.'" By now we can see that this "cognitivist" view of emotions

(Lumhold 1992) is misleading,[1] because *all* thought is embodied (Damasio 1994, 1999; Lakoff and Johnson 1999; Sweetser 1990). The body is *never* absent. It would therefore be more accurate to conceptualize the person not as a thinker for whom feelings sometimes intrude, but as a socially connected feeler whose reflective thoughts occasionally intrude on his intuitions (Haidt 2002).

A second weakness of social movements scholarship is the tacit belief on the part of sociologists interested in emotions and social movements that culture A) cues more or less universal emotions, B) shapes the expression of these emotions, but C) does not really shape feelings themselves. Evidence suggests that this is wrong. The studies reviewed above on culture, language, and feeling suggest that culture constructs feelings in profound ways. Many English emotion words do not translate easily into other languages, just as there are no precise English translations for *Angst*, *amae*, *haji*, or *lajya*, among innumerable others. Just as it would be awkward for a Japanese sociologist studying the American Civil Rights movement to theorize the structural causes and timing of feelings of *amae* and *haji* on the part of American activists, or an Indian sociologist to ruminate on the experience of *lajya* among German environmentalists, so it is inappropriate for British and American sociologists to theorize the role of emotions like *fear*, *anger*, and *hope* in social movements as such.[2] This is probably not much of a problem for studies of, say, American social movements by American scholars. However, for social scientists interested in developing theories of emotions and social movements that are sensitive to cultural differences and meaningful across cultures, the problem of the relations between language, culture, and emotion words is a serious one.

"Resonance" with "sentiment pools." The idea that successful social movements find ways to make their messages "resonate" with preexisting "sentiment pools" (McCarthy 1987) is a cardinal idea in studies of social movement "framing." Social movements' messages are thought to resonate with their intended audiences through several processes of "frame alignment": frame bridging, frame amplification, frame extension, and frame transformation (Snow et al. 1986). Questions of the meaning of these terms, and how one ought to investigate frames, resonance, and sentiment pools, have dogged social movement scholarship for some time (Benford 1997). Although it does not provide all the answers, a biologically aware cultural analysis can help here. If we accept that social and political attitudes are often shaped by ideas about the body (Haidt and Hersh 2001; Rose 1999), then to establish meaningful connections between social movement discourses and public opinion, it would be useful to do two things. First, researchers would do well to focus on the moral views characteric of a social movement's intended audience. Specifically, it would be useful to know something about their feelings about the body and sexuality, and whether their moral judgments tend to be rooted in "ethics" of autonomy, community, or divinity (Shweder et al. 1998) and in emotions associated with each ethic (Rozin et al. 1999). Second, research reviewed in this paper suggests that metaphors that crop up in social movement discourses will resonate with a movement's intended audience when these metaphors are grounded in bodily and emotional experiences familiar to that audience, and when these associations between language, thought, and the body and emotions are well established (i.e. institutionalized) within a culture. Social movement analysis is already moving in this direction, toward more careful study of metaphors in movement discourses (Kane 1997; Ignatow 2004).

For a body-aware cultural analysis of social movements, the body, thought, language, and culture, and the relations between them, all demand recognition. For the study of social movements, the promise of bodily cultural analysis is greater sensitivity to cultural differences in feelings and their expression, a more plausible view of the effects of the body on culture, a better understanding of the relations between emotions, the body, and discourses, and, perhaps, because of all of the above, an incorporation of the body and emotions into social movement theory that is durable rather than episodic (Dobbin 1999).

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[1] This cognitivist perspective on emotions is also overly individualistic, as emotions are defined as "highlighting a deep sense of the actor's *self*" and are 'seeped with the apprehension that "*I* am involved"" (Aminzade and McAdam 2001: 18, italics added). The Western, atomized self implied here is never problematized, but ought to be (Markus and Kitayama 1991).

[2] For example, see Aminzade and McAdam's (2001) chapter "Emotions and Contentious Politics," in which they purport to stress "the cultural construction of emotions," but they A) conceptualize culture in terms of cognition, and B) conceptualize emotions through Western ethnopsychology. For them, "emotions" are more or less universal, although they are cued differently in different cultures. To illustrate their approach, they write that "The display of animals in circuses and sideshows, for example, may generate anger, pity, or joy depending on the observer's interpretation of the situation" (p. 20). The authors fail to consider that anger, pity, and joy are all Anglo-American cultural constructions, in just the same way that *haji* and *lajya* are constructions.

Conclusions

The body is the base, or at least a base, of culture (Freud 1976; Mestrovic 1992). Research from the neurosciences (Damasio 1994, 1999), cognitive science (Lakoff and Johnson 1999), and cultural psychology (Haidt 2001, 2002) provides compelling support for this view. Thus cultural sociologists can no longer ignore the body, and in fact they have much to gain by including the body in theories of culture—and not simply as a passive agent, but also as an active shaper of culture. Conceptualizing culture as rooted in the body can surely encourage new avenues of empirical research (e.g. Ignatow 2003, 2004) and further strengthen and deepen the "strong program" in cultural sociology. And while many social scientists follow Aminzade and McAdam (2001: 20) in assuming that research on culture, emotions, and the body must employ either "universalist, positivist" methods or "relativist, interpretive ones," research in the subfields reviewed above has transformed this distinction into something of a red herring (e.g. Haidt, Koller, and Dias 1993; Shweder et al. 1998). In so far as sociologists can bring insights from these and other areas to bear on studies of culture, they may transcend sociology's unfortunate divide between positive methods and relativist theory.

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