

## The Problem of Embodiment in the Sociology of Knowledge: Afterword to the Special Issue on Knowledge in Practice

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How do we know what we know? Sociology has a simple answer: We have learned it. Since we were little, we have learned to relate to the world through categories that our social environment readily supplied for us (Durkheim 2001; Durkheim and Mauss 1963; Martin 2000). Our sense of time, of space, or of the sacred—all of this came mediated by the people and institutions that surround us. Both forcefully and imperceptibly, the relations to others in our lives, such as to our parents, our teachers, the people in our neighborhood, individuals we were made to admire and those we were made to dislike—in short, everyone we came to relate to in some manner—helped our minds feel and think in ways that are very specific and not easily changed. They formed our judgment and shaped our morality. Our bodies were also trained in the process, too. We came to recognize and experience certain physical sensations, to move and use our limbs in this or that manner, and know when to feel disgust and revulsion (Mauss 2006; Elias 2000). Some of us learned to pull our elbows in when sitting at a table while others never gained the faintest idea that the way we hold our elbows might hold any importance at all.

The things that feel natural to us are not natural at all. They are the result of processes of socialization, inculcation, and training. But that does not mean we never intervene in the process. With age comes a sense—sometimes faint and unconscious—of the arbitrariness of the social game and the rules that govern it (Mead 1967), and often a more or less articulated impulse to exert agency in an effort to change the game. Ways of knowing clash all the time, we bitterly find out. These clashes are exposed daily in the small and large symbolic struggles that pervade life in society (Bourdieu 1987; Lamont 1992), and reveal the one meta-rule that governs it all: politics. And thus we might rebel against the game, or act upon our minds and bodies to shift our trajectory within it. All of this occurs in ways that fit our perceived social or moral aspirations.

The six papers in this collection offer a wonderful spectrum of the politics and praxis of knowledge: the way people work on themselves and enroll others into projects that feel important—*justified*—to them. We go from the most introverted and quiet—controlling one's breathing in an effort to reach the goal of enlightenment—to the most extroverted and

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agonistic—forming a professional association in an effort to keep competitors out; from the most embodied form of knowledge (curatorial skill) to the most abstract (planning and budgeting models); and from the most micro-social (individuals playing a board game) to the most macro-social (an ethnic group engaging in a collective struggle). Yet, the transitions are smooth and the cross-cutting themes fairly obvious. Due to lack of space, I review just one of them exhaustively: what I have called in the title the “problem of embodiment.”

The problem of embodiment refers to the standing of personal vs. abstract forms of knowledge in modern society. The papers in this issue all provide varied and colorful examples of this relationship. Taken together, they also weave an important narrative about the social conditions under which embodied knowledge—in my definition, a form of knowledge that cannot be easily dissociated from the personal qualities of its bearer—becomes legitimate and the conditions under which it is dismissed as irrelevant.

### **Embodiment as the path to true knowledge**

We come across the theme of embodiment most forcefully and directly in the first three pieces in this volume. Daniel Fridman’s paper analyzes how people train their bodies and souls to acquire a “financial mindset” by forcing themselves to play financial board games. The author is cautious to immediately demonstrate that this is not your usual game. It is a hard and deadly serious discipline. Much like marathon runners who exercise regularly in order to prepare their bodies to go the distance, the people in *Cashflow* are there for the long haul: the game may last for months. And much like the Balinese men who bet on the local cockfight (Geertz 1973), their play is deep: the “real” financial self is never very far away—for instance, the players routinely copy their personal data into the financial statement forms supplied by *Cashflow*. The physical and emotional commitment is intense, then, because the real financial situation is a matter of social life and death. And people do learn: they acquire a new vocabulary (assets and liabilities, the rat race), make sense of their financial situation and life experiences in new ways, and learn to reorder their personal finances and planning strategies. Does it yield the promised material successes? Who knows? Maybe crafting oneself as a certain kind of financial person *was* the true social stake here.

Like the *Cashflow* players, and not unlike the curators who marshal their own individuality in the exhibit (Acord, this issue), Michal Pagis’s practitioners of meditation yearn to fashion or refashion themselves—in this case through vipassana Buddhism. Her paper, written about a setting in which philosophical teachings are taught and learned in a primarily sensory way, through the mediation of the body, provides perhaps the most extreme illustration of the embodied character of knowledge. In the meditation center laboratory, students “learn” about emotional liberation from cravings and attachments through the repeated experience of bodily discomfort, pleasure and pain. They make the teaching of “impermanence” their own only after having been forced into prolonged immobility and seeing their mind wander aimlessly as a result. Things are being transmitted unconsciously through the flesh that no conscious, articulate discourse would be as effective at conveying.

Physicality also plays a critical role in Sophia Acord’s analysis of how modern art curators put together exhibits. Though the exhibit has been prepared in advance, and always relies on some pre-existing conceptual design, it is only in situ that it finally comes to life and that the curator “knows” where each piece must go. Rules in the art world are tacit and

only come together when confronted to the material reality of artifacts and their physical placement in the museum. The social organization of modern curatorial practice, which redefines curators as active creators involved in the artistic process itself (as opposed to merely intermediaries that channel the creative work of others), also sustains this eminently embodied way of expressing one's authority and implicit mastery of the field's cultural codes and conventions. Knowledge is produced through an "inspired" logic, to use Boltanski and Thevenot's (2006) vocabulary, and needs no other form of justification than the curator's best judgment.

### **Disembodiment as the path to true knowledge**

Physical manipulation is, of course, also involved in the development of abstract forms of knowledge. But the latter only achieves authority if certain rules are followed: standardization, reproducibility, consistency, and publication in legitimate channels. In Chantelle Marlor's account (of a conflict reminiscent of the one described by Wendy Espeland in *The Struggle for Water* (1998)), both the government biologists and the Kwakwaka'wakw traditional marine harvesters work directly with clams. Both groups dig in beaches; both get their hands and feet dirty by collecting clams in sacks; both count the clams they have harvested. A perfect and exhaustive survey of clams is impossible, however, so the sampling method is the most important ingredient in shaping the final assessment. In sharp contrast with Acord's curators' inspired engagement with their physical environment, or Marlor's Native Americans' experience-based and embodied approach (each harvester's knowledge about clams is different from the next harvester), the government biologists' sampling is systematic, precise, and accountable. This means that it is completely abstracted from the particular physical environment in which it is carried out. Every beach gets sampled in the same manner as every other beach. And knowledge is purposefully disembodied: anyone can go back to the same beach and replicate the same results. One biologist's knowledge is as good as that of the next.

Theodore Porter (1995) has shown that modern societies produce trust through numbers. What Marlor shows is that *numbers by themselves are not enough*: they have to be produced in a particular way or they literally "don't count." It is the procedures that stand behind them that elicit authority; the trust-making enterprise is also sustained, importantly, by the already established social position of the numbers-gatherers and the social networks in which they are embedded (scientific publication outlets, professional institutions, etc.). After all, what stands behind the "scientific" struggle between Canadian Native Americans and government biologists is a struggle about different forms of capital and power.

All papers in this second set deal with the question of the illegitimacy of the personal, in one way or another. Owen Whooley's piece about the early years of the American Medical Association is especially revealing on this point. Challenged by the proliferation of quackery in the practice of medicine, orthodox doctors in the United States turned to the prestigious Paris School for guidance in establishing reliable medical standards. The Parisians' approach was focused on the systematic physical examination of patients before and after death: practically, this meant an emphasis on external symptoms through local bedside observation and on internal pathology through autopsy, all of it produced through standardized procedures (e.g. vital signs) and props (e.g. charts). In part, of course, the approach relied on the highly personal assessment of doctors. In Paris these assessments were also coupled with a centralized reporting system that allowed for aggregation and analysis across cases—and for a real "school" to emerge. Absent such an institutional

infrastructure, however, a mass of personal observations would remain just that: a mass of observations improperly disembedded from its source, “awaiting a theory or a fire.”<sup>1</sup> Again, it was not so much the number of observations that mattered but the rules and conditions of their collection, and even more their mode of exposition.

Though American orthodox doctors adopted the Parisian school’s bedside practices, they failed abysmally at producing a coherent, public account for their results, and (for a reason the paper does not go into) it is their rivals, the homeopaths, who were statistically literate, who achieved control of the meta-level. Ultimately mainstream doctors had to resort to a different strategy to establish their authority—organizational closure, in a manner evocative of Abbott (1988)—but even that was not enough to dismiss the powerful claims homeopaths could muster thanks to their effective deployment of statistics.

The real power of statistics was that it allowed the homeopaths to “show” publicly that homeopathy made a difference in the treatment of cholera where orthodox medicine did not. The disembedding of knowledge (or “disentanglement” as Callon (1998) puts it) through statistical aggregation was important because people cared about results. The public cared because people were dying. And so did public health officials, for the same reason, and also because they were being held accountable.

Results are a powerful source of legitimacy for all knowledge claims. Nothing excites our modern society more: thanks, in part, to the endless refinement and institutional success of accounting techniques, the need to demonstrate outcome effectiveness pervades all of our institutions. Thus we have become accustomed to judging every bit of policy not on its merits relative to some abstract philosophical or political goal (e.g. fairness or aesthetics) but on its efficiency relative to its monetary cost and benefit. Monika Krause’s examination of the vast expansion of results-based management in state bureaucracies and international organizations reminds us how much we have evolved into “audit societies” (Power 1999; Strathern 2000; Hopwood and Miller 1994), and of enormous political implications resulting from this evolution. In the minds of the technocrats who run these administrations, Krause suggests, external accountability of state *services* to outside *citizen* constituencies in the name of broad social goals has been replaced by internal accountability of *specific interventions* carried out on *specific beneficiaries* in the name of organizational success. No matter that the policies are progressive in their origins and spirit; the linguistic and managerial shifts Krause identifies in her paper still amount to a powerful political reorientation, away from the traditional progressivism of collective and long-term goals, and toward a state-produced segmentation of the citizen body (Foucault 1990).

Auditing techniques also transform the social role of knowledge in its interaction with politics in many other ways. They curtail our political imagination. As Harold Wilensky (2005) has argued, the narrow definition of outcomes (which must be individual and measurable) in these techniques might in fact over-determine the frequent finding of policy evaluation research that social policies are ineffective. And they distort our moral conscience. One example of this can be seen in the recent vogue of social experiments, particularly in the developing world, in which policy “treatments” are subjected to the needs of experimenters (e.g. one half of a village gets textbooks, or condoms, and the other half does not) rather than to the needs of the populations they are supposed to serve. These experiments are often conducted with often little regard for the moral and political implications of these treatment differences on the people who have to live with them firsthand.

<sup>1</sup> As Ronald Coase reportedly said of American institutionalism (quoted by Oliver Williamson in Smelser and Swedberg 1995, p. 78).

These efforts are all carried out in the name of science, rationality, and impartiality. But no matter how much the sciences and professions try to distance themselves from politics, they always inevitably return to politics—first to their own internal struggles of authority (e.g. the battle between orthodox doctors and homeopaths); and second to the broader political conflicts raised by their relationship to policy decisions in which some people lose and others win (e.g. what is the situation of clams in Kwakwaka'wakw territory and what to do about it?). Behind each set of rationalized instruments always stands a particular political and economic philosophy, as well as particular social groups. Hence it is no wonder that the instruments themselves always become objects of political contention in the end (Fourcade 2009).

Rationalization can take many forms, but the form it takes is largely the result of a politico-historical process. Sociologists, including many of the authors included in this volume, are thus left with studying the mechanisms by which certain tools and methods are selected over others, and keep finding themselves insisting upon the radical historical contingency of the processes at work. We know, for instance, that the disembodied, depersonalized, “mechanical objectivity” (Daston and Gallison 1992) of present-day science and expertise was not always there: as Steven Shapin (1995) has shown, 17th century science established its “truths” in a much more “mediated” manner, through the physical co-presence of a lay public and their eyewitness accounts. Thus, unless we are wedded to a deterministic vision of history, we could imagine a world in which the Kwakwaka'wakw clam diggers have acquired enough authority (by enrolling scientific allies, for instance, or through an expansion of their political rights) to effectively challenge the state biologists in their assessment of the clam population.

### **Different forms of justification**

In some ways the papers in this collection feel like apples and oranges. But in other ways they don't: they are all concerned with the social conditions under which some ways of knowing acquire authority over others. The first three papers analyze modes of knowing that draw their authority from embodiment and the disciplining, from within, of a self that is the true object of knowledge. You will succeed financially, or be inspired or enlightened, only if the rules of household accounting, the art world, of vipassana Buddhism are deeply incorporated, literally made flesh, and naturalized in your personal habits and orientations. Some of these rules are pretty strict. Others are more implicit, but all are acquired through long-term practice and the disciplined training of the self; none can be simply taught through discursive elaboration.

The last three papers reveal another type of knowledge work, this time based on the constant effort to distance the self from the object of knowledge—a disciplining from without. The authority of statistics, accounting, and of biological sampling comes from the numerical form. Of course, none of this numerical knowledge could be produced without physical selves: biologists digging in beaches, doctors and nurses recording temperature levels, or state managers putting together accounting matrices. But these selves are self-effaced, made to be invisible, and any hint of their presence would be perceived as pollution. This self-effacement is the dominant condition of objectivity in our particular world at this particular time, but it does not stand unchallenged.

These two modes of knowing often clash (as they do in Chantelle Marlor's study). Yet paradoxically they are both products of our modern condition. The “organic” society that thrives on impersonality and abstraction is the same society that consecrates and reveres

individuality, as Durkheim (1984), Simmel (1971), and Foucault (1990) have all pointed out. Hence the (somewhat narcissistic) impulse toward self-crafting that results in people taking up meditation and financial self-help is, perhaps, nothing more than the flipside of the ravenous search for the ever more standardized yet individualized forms of surveillance and control that pervade all our institutions.

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