Historians have long been allergic to psychological forms of explanation, so it seems unlikely that many will be eager to jump on the bandwagon of neuroscience or neurohistory. Despite many reasons for caution, an ongoing dialogue with neuroscience offers the prospect of new approaches to such perennially vexed issues as agency, experience, action, and identity. Neuroscience does not provide a handy model that historians can simply apply to their research. It functions more like psychoanalysis once did (and still does for some); as a field, it poses important questions and opens up new approaches to the mind, the self, and human behavior.

Neuroscience is a fast-growing field that has gained much attention of late, especially at universities, but also among the general public. Membership in the Society for Neuroscience increased by 46 percent just between 2001 and 2010, to more than 41,000 members.¹ Research on the brain has increased exponentially since the development of new brain imaging techniques, especially the introduction of functional magnetic resonance imaging (fMRI) in the 1990s. Use of fMRI makes it possible to detect functional activation of different locations in the brain through measurements of blood volume changes or changes in the concentration of oxygen. In 1992, fMRI provided the experimental basis for just four publications. By 2007, the rate had reached eight per day.² Add to that the explosion of research at the cellular level of neurons, glial cells, and synapses in humans, mice, roundworms, sea slugs, and other animals, and the output is staggering. As might be expected, new books aiming to synthesize these studies are appearing at an accelerating rate, too.

I cannot pretend to do justice here even to the synthetic works on the subject. The rapid expansion of research in neuroscience means that it is not a stable, fixed object. As historians have begun to test the waters of this field, it has rapidly become apparent that neuroscience can serve various ends; criticisms of humanists trying to engage neuroscience often include charges that they have read the wrong studies, misinterpreted the results of experiments, or worse yet, turned to neuroscience looking for a universalizing, anti-representational and anti-intentional ontology to bolster their claims.³ But those debates notwithstanding, the question of the self is a

³ See, for example, Ruth Leys, “The Turn to Affect: A Critique,” Critical Inquiry 37, no. 3 (2011): 434–472; and the critical remarks about the use of neuroscience, especially by Jan Plamper, in Nicole
huge and difficult subject on its own. Attention to recent developments in neuroscience can stimulate new ways of thinking about historical interpretations of selfhood. It may do this just by shaking out new metaphors that help us make sense of human identity and action.

Historians are unlikely to engage with the outpouring of neuroscience research unless they give up or at least temporarily bracket the discipline’s longstanding antagonism to any systematic psychological explanation. The resistance to explicit psychologizing is by now virtually defining of historical explanation. It can be traced back to objections against the conclusions reached by the field known as crowd psychology, which was championed by Gustave Le Bon. Citing psychological research of his time, his book The Crowd (first published in French in 1895) argued that the individual in a crowd suffers a kind of hypnosis in which he becomes “an automaton who has ceased to be guided by his will.” On becoming part of an organized crowd, “a man descends several rungs in the ladder of civilization” and becomes a “barbarian.” Crowds have the characteristics of “beings belonging to inferior forms of evolution,” which Le Bon equated with “women, savages, and children.” Le Bon believed that crowd psychology explained the “pathologies” of modern society, such as workers’ strikes and riots and especially socialism.

Given the affinity of crowd psychology with extreme right positions—Mussolini claimed to have read Le Bon’s book several times, and Hitler may well have used it as a source for Mein Kampf—it is hardly surprising that the pioneers of social history in the 1950s and 1960s explicitly distanced themselves from this kind of psychological analysis. George Rudé, for example, contradicted Le Bon in his studies of the crowd in history. The Parisian crowds of the French Revolution were composed, Rudé insisted, of hardworking, ordinary family men of the neighborhood who wanted cheap and plentiful food above all else. In short, they acted out of conscious, rational motives, not out of irrational mob psychology. Rudé insisted that crowd behavior was best explained in sociological, not psychological, terms.

An exception to the rule may underline its general validity. The one section in E. P. Thompson’s influential The Making of the English Working Class (1963) that used psychological categories was the one on Methodism. Why, he asked, were so
many working people willing to submit themselves to this form of “psychic exploitation”? Thompson regarded the “evidence of hysteria” in Methodist revivalism as an unfortunate psychological response to the defeat of revolutionary impulses in England. Good crowds were never subject to psychologizing, it seems, only bad (in this case, politically passive) ones.

The rise of social history therefore entailed a rejection of most forms of psychological analysis. Social explanations seemed to validate the motives of ordinary people, whereas psychological interpretations effectively censured them. Michel Foucault did not have the same aims—he was not interested in validating the motives of the crowd—yet his approach worked in the same direction, against any psychological explanation. Although he was deeply concerned with the construction of individuality through various kinds of disciplinary practices, his focus was on bodies, not selves. In fact, he denied that individual consciousness was even involved: “If power gets into the body, it isn’t because it has been interiorized in people’s consciousness.”

Influenced by Foucault, cultural historians, and especially gender historians, have produced groundbreaking work on discourses and practices regarding the body. Discipline in schools, factories, prisons, armies, and convents, practices of femininity and masculinity, corporal punishment, fasting, bathing, etiquette, dress—the range of studies on various aspects of the body is truly astonishing. But almost without exception, this work, as illuminating as it is, aims at uncovering the social and cultural construction of bodies, and only secondarily, if at all, selves. It does not address what is inside the black box of the self, that is, whatever interacts with, limits, and sometimes chooses between different kinds of social construction.

In short, the “iron curtain” between historians and psychology that Harvard historian William L. Langer lamented in 1957 remains standing. Neither psychoanalysis nor academic psychology has yet been able to tear it down. Widespread philosophical, clinical, and cultural criticism of Freud’s views; disputes among Freudians themselves over the correct interpretation of Freud’s work; the rapid multiplication of alternative forms of clinical practice; and the current enthusiasm for pharmacological treatments of mental illness all served to undermine in their own ways the legitimacy of psychoanalysis and even of all forms of talking therapy. The few attempts to build up a subfield of psychohistory collapsed under the weight of its presuppositions. Yet many of Freud’s basic insights remain pertinent: it is now a commonplace of neuroscience to insist that mental activities are susceptible to scientific analysis, that most mental processes occur unconsciously, that the mind includes a

9 As quoted in Robert M. Strozier, Foucault, Subjectivity, and Identity: Historical Constructions of Subject and Self (Detroit, 2002), 70 (from an interview with Foucault published in 1979).
10 I have found especially helpful the critique developed in Lyndal Roper, Oedipus and the Devil: Witchcraft, Sexuality, and Religion in Early Modern Europe (London, 1994).
12 On the contemporary view of psychoanalysis, see, for example, Peter Brooks and Alex Woloch, eds., Whose Freud? The Place of Psychoanalysis in Contemporary Culture (New Haven, Conn., 2000).
13 I discuss the demise of psychohistory at greater length in “Psychology, Psychoanalysis, and Historical Thought.” There is another view: http://www.ciospsyche.org.
sense of self and agency (Freud’s ego), and that the mind also serves to connect an individual to social communities (Freud’s superego).14

The prospects for dialogue between history and psychology are even bleaker when it comes to academic psychology. Psychoanalysis, in its clinical practice, relies on historical narratives (the stories the patient tells the analyst), whereas research psychologists depend on studies of behavior carried out in the laboratory setting and rarely invoke any form of historical interpretation except when it concerns the history of their own discipline. Moreover, academic psychologists have not agreed upon a definition of the self. A leading social psychologist who reviewed some 30,000 articles on the self published between 1974 and 1993 concluded that “the thousands of journal articles dealing with the self have seemed to make the answer to that fundamental question [what is the self?] more elusive rather than clearer.”15

Not surprisingly, then, some cognitive scientists have come to view the self as a kind of mirage. Their reasoning converges in unexpected ways with those of post-structuralists such as Foucault (the self as optical illusion), Jacques Derrida (the self as phantasm), or Jacques Lacan (the self as misrecognition). The self, according to the psychologist Michael S. Gazzaniga, for example, is a fiction, the illusion that we are in charge of our lives. In his view, “psychology itself is dead.” It has been replaced by neuroscience, cognitive science, and evolutionary biology.16 Yet even Gazzaniga does not deny that there is at least a “sense of self” that plays an important role in the way we think about and act in our lives. In a recent study of split-brain patients, he argues, “Although it has been difficult to study the ‘self’ per se, there have been intriguing observations about perceptual and cognitive processing relating to the self.” In this study, he and his collaborators concluded that a sense of self “arises out of distributed networks in both [left and right] hemispheres [of the brain].”17

Given the uncertainties about selfhood (what it is and how it is produced), it might seem that any history of the self is next to impossible, yet new tracks are being laid toward that destination, and they are leading toward neuroscience. The prospect of convergence emerged most notably in the study of emotions. The trailblazer in historical studies was William Reddy, who read deeply in cognitive psychology in order to develop a history of emotions in France for the period 1750–1850.18 Emotions have proved to be a promising object of historical study because they show up

14 Eric R. Kandel, The Age of Insight: The Quest to Understand the Unconscious in Art, Mind, and Brain—From Vienna 1900 to the Present (New York, 2012).
in historical documents more readily than any other expression of selves.\textsuperscript{19} Anger, disgust, fear, joy, surprise, and sadness can be traced in many different kinds of documents, ranging from court cases to paintings. Paul Ekman famously argued that these were basic human emotions found in all cultures and that they give rise to universally recognizable facial expressions.\textsuperscript{20} Even if this is true, and there is still much controversy about the notion, different contexts shape different outcomes, making cultural and historical studies essential, including, in particular, historical studies of the self in the non-West.\textsuperscript{21}

Emotions are now singularly pivotal in neuroscience. Hannah and Antonio Damasio, for example, demonstrated in their studies of neurological damage that the emotions are essential elements in reasoning and decision-making. People who lose some kinds of emotion as a result of strokes, head injuries, or tumors also lose their ability to make certain kinds of rational decisions. Thus reason or rationality is not the categorical opposite of emotion or feeling; reason depends on emotion for its functioning. So influential is this kind of research that some now refer to “affective cognition” or “the affective sciences.”\textsuperscript{22}

While acting as a hinge between body and mind in the individual, emotions also connect individuals with society and culture more generally. Emotions start on the individual level with unconscious bodily reactions and develop through a series of steps into self-conscious feelings.\textsuperscript{23} Different communities within society have different ways of regulating the expression of emotion, and societies and cultures also vary in the feeling and expression of emotions. One important and often overlooked aspect of power, as Reddy affirms, is the capacity to determine the parameters of emotional expression. When we say, for example, that Louis XIV set the tone at his court, we mean that he controlled the ways his courtiers expressed hostility, envy, or even sadness and happiness. The study of regulation of the expression of emotion invites comparisons, not only among historical periods, but also among different cultures, non-Western as well as Western. While such comparisons have sometimes been invidious (Norbert Elias portrayed the Middle Ages as less civilized, more im-

\textsuperscript{19} See, for example, Daniel Lord Smail, \textit{The Consumption of Justice: Emotions, Publicity, and Legal Culture in Marseille}, 1264–1423 (Ithaca, N.Y., 2003).

\textsuperscript{20} The literature by and about Ekman is very large. See for example, Charles Darwin, \textit{The Expression of the Emotions in Man and Animals}, Introduction, Afterword, and Commentaries by Paul Ekman (Oxford, 2002).

\textsuperscript{21} A review of some of the disputes can be found in Paul E. Griffiths, “Basic Emotions, Complex Emotions, Machiavellian Emotions,” \textit{Royal Institute of Philosophy Supplement} 52 (2003): 39–67. The issue of cross-cultural differences is important and vexed. Many psychological studies of such differences rely on Western approaches (e.g., comparing responses of college students in the U.S. to their counterparts in Japan using the same questionnaire). Yet anthropological studies of differences in the self have their own issues, as Douglas Hollan pointed out many years ago; the use of simplified and idealized notions of cultural difference can obscure similarities in subjective experience. Hollan, “Cross-Cultural Differences in the Self,” \textit{Journal of Anthropological Research} 48, no. 4 (December 1992): 283–300. The main lesson to be derived is that much more historically informed study is needed.


\textsuperscript{23} Here I differ from Ruth Leys, who considers Damasio an arch anti-intentionalist (“The Turn to Affect”) but mainly cites his earlier work.
pulsive and prone to violence, and more naïve and simplistic than the periods that followed), the work of historians such as Barbara Rosenwein and Ute Frevert demonstrates that they need not be.24

From his work on emotions, Antonio Damasio has developed a model of the neural basis of the self that is at once biological and historical. The self depends, he argues, on evolutionary features of the human brain developed during the Pleistocene (that is, during the emergence of Homo sapiens); mind, conscious mind, and conscious mind capable of producing culture emerged in sequence.25 The self is a perspective “rooted in a relatively stable, endlessly repeated biological state” that gets its core from the structure and operation of the organism and then develops through slowly evolving autobiographical data. The self therefore depends on continuous reactivation of memories of the past and memories of plans and projects for the possible future—in other words, a historical or narrative sense. The self is simultaneously stable because it is biologically rooted in the body and brain, and open to history because this biological state must be continually reactivated and updated with new autobiographical information. There can be no “extended” consciousness, in Damasio’s terms, no consciousness of self, without a sense of history, of memories as objects, and of time as a scale that transcends immediate experience.26

Although many elements in Damasio’s argument have remained the same over time, others have changed, most notably his insistence in recent work on “primordial feelings, which signify the existence of my living body independently of how objects engage it or not.” He now considers this crucial: “It is the primitive behind all feelings of emotion and therefore is the basis of all feelings caused by interactions between objects and organism.” It is one of four elements that in the aggregate constitute a self “in its simple version.” The others are having a standpoint for mind based in the body (my body), the feeling of ownership of mind, and the feeling of agency (“the actions being carried out by my body are commanded by my mind”).27 The key words are “perspective” (or “standpoint”), “feelings,” and by implication “embodiment.”

Despite the flood of new findings in neuroscience, consciousness and selfhood have yet to be satisfactorily explained in biochemical terms. As the philosopher John R. Searle titled his critique of Damasio’s book Self Comes to Mind (2010), “The Mystery of Consciousness Continues.” In Searle’s view, a scientific account of consciousness will one day emerge, but to date it has encountered intractable obstacles: efforts to establish a neuronal correlate of consciousness have so far failed, and theoretical attempts like Damasio’s to explain the appearance of consciousness as an interaction between self and mind fall short because they simply transfer the problem of consciousness to either mind or self and end up assuming that the self is already conscious. For Searle, it is consciousness that explains the self, not the


25 Antonio Damasio, Self Comes to Mind: Constructing the Conscious Brain (New York, 2010), 193.

26 Damasio, Descartes’ Error, 238–239.

27 Damasio, Self Comes to Mind, 196–197, emphasis in the original.
other way around, and no one yet has been able to explain the advent of conscious-
ness. It is worth noting that Mikkel Borch-Jacobsen similarly criticized Freud for
assuming the consciousness of the ego in order to explain its emergence: “How is
it that I may have a relation to my body as my body, my own body, if it is not by saying
‘I,’ ‘me,’ ‘ego, ’Ich? . . . Are we not dealing, much more probably, with the ego-
agency, with that ego which Freud admitted he had not ‘sufficiently studied’?” In
other words, there is still some question as to how Damasio’s primordial feelings of
my body existing independently (or Freud’s ego) emerge.

Not all is uncertain, however. Damasio is on to something, Searle grants, when
he emphasizes that “in any account of consciousness we need to explain how our
conscious states are experienced, not just as a sequence of isolated qualitative sub-
jective events, but as ‘my experiences.’” Having a sense of self as the protagonist
in the ongoing experiences of the body is crucial to consciousness, and ultimately to
a sense of agency and identity. This sense of self emerges from the mind’s inter-
pretations of the body’s interactions in the world.

In the last twenty years, cognitive science has increasingly embraced an embodied
view of the mind, rather than an exclusively computational one. In the computational
view, the brain is like a computer sifting through representations generated by and
located in the brain. In the embodied view, endorsed more vociferously, perhaps, by
philosophers of mind than by neuroscientists, “cognition is not the representa-
tion of a pregiven world by a pregiven mind but it is rather the enactment of a world and
a mind on the basis of . . . actions that a being in the world performs.” In
the embodied view, context (including the body as well as the environment in the broad-
est sense) cannot be reduced to sensory input; the interactions between body and
brain and environment and body create the self and then propel its continual up-
dating through interactions between self, brain, body, environment, and experience.
Perception and action are intertwined; perception does not precede action.

Philosophers who advocate the embodied view of mind often refer back to the
phenomenological philosophy of Maurice Merleau-Ponty, who was himself much
influenced by studies of childhood cognition. His Phenomenology of Perception
(1945) drew attention to the philosophical importance of the embodiment of the self.
An individual’s perception of the world is not solely caused by the impact of sen-
sations from the external world, he argued; it occurs because the self is able to project
a world in which the stimulus makes sense. Cognition in his view depends on de-
veloping a body schema (sche ma corporel) that locates one’s own body in the world
and facilitates our understanding of other bodies. The embodied self therefore

29 Searle, “The Mystery of Consciousness Continues.”
30 Francisco J. Varela, Evan Thompson, and Eleanor Rosch, The Embodied Mind: Cognitive Science
and Human Experience (Cambridge, Mass., 1991), 14, as quoted in Zoe Drayson, “Embodied Cognitive
Science and Its Implications for Psychopathology,” Philosophy, Psychiatry, & Psychology 16, no. 4 (2009):
329–340, quote from 331.
31 See, for example, George Lakoff and Mark Johnson, Philosophy in the Flesh: The Embodied Mind
and Its Challenge to Western Thought (New York, 1999), xi.
32 See, for example, Ted Toadvine and Leonard Lawlor, eds., The Merleau-Ponty Reader (Evanston,
Ill., 2007), 147.
develops its own contribution; it is not just a product of external sensations (or social construction). It has to act in its own right to even begin to make sense of the world. To hold to a concept of an embodied self is to give priority to the body’s interactions with the world. It follows, then, that mind and body are not separate. This lack of separation might seem obvious, since the brain is located in the body and the mind emerges through brain activity, but the separation of the two (the mind from the body and for that matter the mind from the brain) has nonetheless long been a staple of the history of Western philosophy and of Christian theology. Just what mind is once the dualism of mind and body is given up remains to be seen. In their chapter on the mind in Philosophy in the Flesh: The Embodied Mind and Its Challenge to Western Thought (1999), George Lakoff and Mark Johnson focus on metaphors for the mind and their influence on philosophical positions. Other than insisting that “What we call ‘mind’ is really embodied,” their definitions of mind remain vague: “Mind isn’t some mysterious abstract entity that we bring to bear on our experience. Rather, mind is part of the very structure and fabric of our interactions with our world.”

Even Damasio, with his clear focus on the mind, equivocates. He aims to trace the biochemical and physical sources of “the mercurial, fleeting business of the mind,” but his very choice of language indicates the difficulty involved: “What we experience as mental states corresponds not just to activity in a discrete brain area but rather to the result of massive recursive signaling involving multiple regions.”

Yet mind remains useful—perhaps even indispensable—for thinking about thinking, and so Damasio uses the term frequently without ever giving a precise definition of it. Like self, it is not a thing, but rather a process.

Focusing on the embodiment of the self (or mind) makes it possible to see how the self develops out of originally unconscious bodily processes (even if that development is still the subject of considerable debate). The philosopher Shaun Gallagher relies on experimental studies of newborns, sometimes only a few hours old, to get at the earliest senses of self. Although he follows Merleau-Ponty’s argument about the importance of a body schema for cognition, he finds it present at birth rather than requiring several months to develop, as Merleau-Ponty concluded. Gallagher maintains that newborns must already have a primitive body schema at birth because they are able to imitate the actions of other people (here the evidence is from videotapes rather than from fMRI). In other words, there is an innate body schema. Humans are born with the capacity to start learning immediately about themselves through bodily processes, and it appears that we already have the elements of a rudimentary sense of self at birth.

These studies of newborn cognition, as interpreted by Gallagher (he did not do the experiments), answer some of the objections raised by Searle: self does precede consciousness, as Damasio argues (or perhaps emerges simultaneously), and both develop over time. Gallagher’s argument about a primitive body schema fits with Damasio’s account of a proto-self developing into a core self and finally into self-reflexivity (“extended consciousness”).

Similarly, Gallagher’s emphasis on embodiment, like Damasio’s, calls attention

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34 Lakoff and Johnson, Philosophy in the Flesh, 266.
35 Damasio, Self Comes to Mind, 93.
37 Damasio and Gallagher cite each other’s work, but without much extended discussion. See Gallagher, ibid., 135–137.
to the importance of a sense of ownership of one’s body and of agency in action and cognition. Mental illnesses such as schizophrenia reveal how vital these are to functioning in the world. Auditory hallucinations, delusions of control, and “thought insertion” (“the FBI put a chip in my brain that told me to kill him . . .”) are usually disorders of the sense of agency. Patients suffering from them do not, as it were, recognize themselves as the agents of their own actions. Agency therefore is not just an abstract philosophical issue. It follows from neurological development (in this case, of pre-action neuronal processes connected to the underlying body schema).38

As might be expected, the embodied-self position is amenable to social contextualization and explanation, that is, to explanations that are not skull-bound. Mirror neurons do not just enable social understanding; social interactions influence the development of mirror neurons. Infants respond more rapidly to being the object of attention when they find themselves in more emotion-laden environments.39 But the study of the effects of social interaction on neurological development has been relatively underdeveloped in part because it is easier, though hardly uncomplicated, to set up experiments on individual brains, and in part because much neuroscience assumes that the important things are happening inside brains.40

WHAT DIFFERENCE MIGHT THE EMBODIED SELF make to historians? Historians hardly need to be convinced that important things are happening outside of brains. The question is rather whether what is happening inside an embodied self makes any difference to history. Even as historians have turned to investigating the forms of embodiment (where Elias and after him Foucault, feminists, and gender theorists have led the way), the self has virtually disappeared, and with it, I argue, the sense of agency and convincing explanations for historical change. The emphasis on the plasticity, trainability, and social construction of bodies has been most successful at explaining how systems such as prisons, factories, or gender and race differences work; it has been much less able to explain how new understandings, practices, or institutions can emerge.41

Many if not most major historical events occurred only because many individuals experienced emotions that were strong enough to impel action. Agency and historical change both depend on an interactive relationship between individual selves and the social or collective dimensions of life (which includes intersubjectivity, the relation of self to self). Individual consciousness, because it is embodied, can change the outcome of action, not through the expression of “free will,” pure subjectivity, or a

38 For more discussion, see ibid., 173–178.
41 Although I disagree with her analysis on some points, I still find extremely useful the analysis of Monique Scheer, “Are Emotions a Kind of Practice?”
disembodied mind, but rather through chains of interaction and interpretation that include but are not limited to conscious thought.42

An example might make these assertions less abstract. The English printer Samuel Richardson published his novel Pamela in 1740. All kinds of models for this work might be cited, yet in many ways this story about a virtuous servant girl was unprecedented. The book became a runaway bestseller, inspiring countless imitations, parodies, denunciations, and encomiums. Richardson’s self was as crucial in this process as his social situations. He reacted to the world around him, but in the process of making that world his, he tried an experiment, and it worked in ways he could not have foreseen. Readers discovered in themselves (primed by their social situation) a taste for this new experience of identifying with a servant girl and her travails. Countless individuals reading such novels learned to identify with persons unknown and unknowable to them, and in this way (or so I have argued) the basis was laid for a notion of human rights.43 Historical change, the appearance of new practices (and new selves), came about through the agency of writers and readers whose ever-changing embodied selves interacted with their ever-changing worlds. The significance, the fragility, and the wonder of this interaction are lost if we think only of trained, plastic, and ever-adaptive bodies.

How can historians reorient their research with these ideas in mind? We cannot do fMRI studies and find out how individual brains reacted to Christian doctrine, tobacco, or newspaper stories of battles, and we cannot assume that present-day reactions to such stimuli would be the same as those in the past. Still, the historical record is full of accounts of the experience of emotions, especially when that experience prompted riots, court cases, or conversions, for example. Direct testimony of internal mental states is not easy to find, though it does exist in abundance after print becomes widely available, but self-conscious expression is not necessarily the most reliable indicator in any case. As I tried to show with the example of Richardson, even the most self-conscious of individuals do not necessarily grasp the significance of their actions; they make sense of them only after the fact. Historians build their explanations from a variety of materials and methods that always include a certain amount of inference. I am simply suggesting that the explanations will be better if they include some attention to the role of individual selves.

With the notion of the embodied self, it is possible to move beyond some of the perennially troublesome philosophical and historical dichotomies. There is no necessary opposition between universalism and difference, biology and history, nature and culture, reason and emotion, a stable self and a decentered one, timeless psychology and chronologically rooted history, or, for that matter, individual agency and social construction. Humans are born with the capacity to develop selves and social relations, but the forms they take differ culturally and historically. Needless to say, however, there is still plenty of room for disagreement about exactly how they interconnect, and historians have an important role to play in uncovering historical differences in development both of selves and of social relations.

Moreover, the embodied self points to a different rhetoric of analysis. Instead of

the linguistic turn, with its emphasis on language, text, and representation as fundamental components in the construction of reality, the vocabulary of embodiment calls attention to gesture, action, movement, and unconscious or tacit forms of knowledge. Experience is not just a linguistic event. Many kinds of knowing precede the acquisition of language and accompany it thereafter. Learning a language and speaking it are prime examples of the subtle ways in which embodied selves are trained and act with agency in an interactive circuit. Emotions are such a compelling subject for analysis because they exemplify the kinds of interactive processes that embodied selves engage in; emotions begin largely unconsciously and set in motion processes that become conscious at some point only to disappear as attention shifts elsewhere.

Neuroscience does not have all the answers, but like psychoanalysis before it, it can help us ask new questions or reframe our old ones. We are all engaged in trying to figure out why people act as they do. Historians can learn from the cognitive revolution, and they can also contribute to it by historicizing the claims made and the metaphors used for interpretation. But we can do that only if we are willing to join the conversation.

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