

Mirrors of Culture¹

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In 1936 and again, in revised form, in 1949, Jacques Lacan delivered a lecture resonant in its arguments with some of the mirror neuron findings (and applications)—including the neurocultural ramifications—of “How Stories Make Us Feel” and “Literary Biomimesis.” That lecture, presented at the Sixteenth International Congress of Psychoanalysis, was what we’ve come to call “The Mirror Stage,” “Le stade du miroir comme formateur de la fonction du Je telle qu’elle nous est révélée dans l’expérience psychanalytique” (1966, 93-100; translated in 2002, 3-9). There he argued that young animals of the homo sapiens sapiens subspecies first understand their objectal future being—that is, first identify as human—by viewing an image of themselves in a mirror and watching as the image moves—fluidly, seamlessly, perfectly and holistically, so it seems to the young animal—in correspondence with and contrast to his own chaotic and triumphant flailing as he is supported by maternal arms or some other prosthetic device (a “trotte bébé” in French: the translators call it a “walker”). In a breathtaking—and breathless—sentence, Lacan sums up what, for him, is the consequence, for humans, of the formative effects of mimetic identification with a Gestalt:

This development is experienced as a temporal dialectic that decisively projects the individual’s formation into history: the mirror stage is a drama whose internal pressure pushes precipitously from insufficiency to anticipation—and, for the subject caught up in the lure of spatial identification, turns out fantasies that proceed from the fragmented image of the body to what I will call an “orthopedic” form of its totality—and to the finally donned armor of an alienating identity that will mark his entire mental development with its rigid structure. (2002, 6; translation of 1966, 97)

Psychoanalysis has a long history of attempting to link representation, and culture more generally, not only to the cognitive dimensions of being human, but also to the embodied affective aspects of “becoming human,” which it also regards as an always ongoing process. In what was perhaps one of his most interesting—and often neglected, at least by recent trends in Affect Studies—late formulations regarding mind-body interimplication, *The Ego and the Id*, Freud makes the point that the ego, or what we might colloquially call the conscious armor with which human animals greet the world

¹ [Editors’ note: this essay is an invited response to two essays included in the present volume: Hannah Wojciehowski and Vittorio Gallese, “How Stories Make Us Feel”; Marco Iacoboni and Deborah Jenson, “Literary Biomimesis.”]

and others, is “a bodily ego,” that is, it is “the projection of a surface” (1960, 20).² It is, in short, embodied, an affective topography, whether or not we want to focus on its “surface” location.³ The initial description of this phenomenon links it to a human being’s perception of his or her own body: “A person’s own body, and above all its surface, is a place from which both external and internal perceptions may spring. It is seen like any other object, but to the touch it yields two kinds of sensations, one of which may be equivalent to an internal perception” (ibid. 19). But in the next chapter, Freud returns to his theory of melancholic incorporation—“an object which has been lost has been set up again inside the ego—that is, an object-cathexis has been replaced by an identification” (23)—to suggest that it serves as a model for all identifications, such that “the character of the ego is the precipitate of abandoned object-cathexes and...it contains the history of those object-choices” (24). Judith Butler has used this argument to suggest that in a culture where homosexuality is (violently) proscribed, normative heterosexual identification is the adoption, as bodily ego, of the foreclosed (that is, given up, but given up before it can be said that the subject has chosen to relinquish) same-sex object of desire, or object-cathexis, since in the transformation from object of desire to identification a desexualization also occurs (1997, esp. 132-50). The point, for our purposes here, is that what Freud describes is a form of mimesis that involves not only seeing and imitating, but also ultimately an idealizing desire. Freud, *contra* Descartes and the Cartesians (and thus *contra* cognitivists), argued for what Wojciehowski and Gallese refer to when they add FoB (Feeling of Body) to ToM (Theory of Mind): embodied simulation. “Embodied simulation,” they write, “mediates the capacity to share the meaning of actions, basic motor intentions, feelings, and emotions with others, thus grounding our identification with and connectedness to others...intersubjectivity should be viewed first and foremost as intercorporeity” (7).

Lacan’s lecture begins by telling its audience that Cartesian philosophy has it wrong, because, in part, mimesis and representation (rather than disembodied cognition) are at the heart of human development, but more importantly because Cartesianism proposes the sufficiency of consciousness for grasping the reality of human experience, whereas Lacan’s description of the mirroring process—like Freud’s description of the bodily ego—demonstrates the degree to which consciousness can be deluded in its apprehension of reality. This may be what the positivism of some of the cultural neurosciences misses in its embrace, how the affective, imitative process and its imaginative corollary shape a fantasmatic reality. If infantile mirroring definitively confers upon the human animal some sense of identity (via an identification, which Lacan defines as “the transformation that takes place in the subject when he assumes [takes up] an image” [2002, 4; translation of 1966, 94]), in bodily, affective as well as cognitive ways, then, Lacan points out, this identification with the object in the mirror who is himself but “better” is what traditional psychoanalysis refers to as an “ideal ego.” What is significant about this is that “this form situates the agency known as the ego, prior to its social determination, in a fictional

² I mention Affect Studies here because it represents the parallel and simultaneous development in Humanities disciplines that attends, like cultural neuroscience, to the affective dimensions of human experience. As a field it has also sought to bridge some of the disciplinary gaps between scientific understandings of human experience and traditionally culturalist understandings.

³ Didier Anzieu, for example, has adapted this notion to the concept of the “skin ego,” thus locating egoic embodiedness specifically in the envelope surrounding and enclosing the body; see Anzieu (1989); also Prosser (1998).

direction that...will only asymptotically approach the subject's becoming, no matter how successful the dialectical syntheses by which he must resolve, as *I*, his discordance with his own reality" (ibid.). The mirror, whether literal or figurative, serves as an apt figure for this question of "fiction": it offers to the physically immature onlooker (at the *infans* stage) a total, static and symmetrical form against a spatial background (which, kinetically, proprioceptively, the onlooker cannot "experience") and it presents that form in reverse (in conventional terminology, right is left and left is right).

Lacan, like the neuroscientists cited in these two essays, drew on the cognitive and behavioral science of his day to bolster some of his conclusions. Thus, like neurohumanism and its relatives, Lacan, initially anyway, was interested in making arguments about "the human condition" that brought humans into greater proximity with other biological life rather than focusing on their exceptionalism, which is what the humanisms of his day (and ours) tended to do.⁴ He was, in this respect, posthumanist *avant la lettre*, although one would probably have to classify all of psychoanalysis as belonging to what Wojciehowski and Gallese call "anti-humanism," since psychoanalytic conceptualizations of the human, like Marxism, emphasize materialism over the traditionally spiritualizing characterizations of humanism (2-5).⁵ The brief invocation of primates (he mentions chimpanzees as being superior in instrumental intelligence at this stage of infantile development yet uninterested in their mirror image) is informed by the work of two scholars which had appeared in the '20s: the French developmental psychologist Henri Wallon's comparative studies of human infants and chimpanzees (1984) and by Wolfgang Köhler's primate experiments and Gestalt psychology (1947; 1956). Whereas Wallon's was the by-now conventionally referred to (and disproved) test supposedly distinguishing those for whom self-recognition and self-consciousness—in short, identity—are relevant (humans) and those for whom they are not (chimps), Köhler's ape experiments have entered the annals of literary history, perhaps via Franz Kafka, whose "Report to an Academy" nearly-contemporaneously speaks from the perspective of an ape named Peter (Kafka 1971, 250-62).⁶ In J.M. Coetzee's *The Lives of Animals*, the character Elizabeth Costello speculates that the "Report" might be based on one of the German psychologist's subjects at the Anthropoid Research Station on Tenerife in the Canary Islands, where Köhler became director in 1913 (Coetzee 1999, esp. 26-30).⁷ The ape Sultan "proved," for Köhler, that chimpanzees use creative intelligence and insight in problem solving. Coetzee's Costello imagines Sultan's

⁴ Dylan Evans argues that Lacan increasingly distanced himself from biological explanations and became more and more "structural" as time went on (2005, 38-55). Jacques Derrida, in *The Animal That Therefore I Am*, takes Lacan to task for the human exceptionalism Derrida finds in his work. See especially "And Say the Animal Responded?" (2008, 119-40).

⁵ A first irony, for me, of the term "neurohumanism" is, then, that whereas "humanism" tends to register human exceptionalism in relation to biological life in general, the comparative studies upon which cultural neuroscience are based tend to de-exceptionalize the human by re-inserting the human into the spectrum of biological being (see Wojciehowski and Gallese 16). For a scholar of the Renaissance in the European West, the term "humanism" refers most obviously to this issue of human exceptionalism; see, for example Pico della Mirandola, "On the Dignity of Man" (1998, 1-34).

⁶ "A Report to an Academy" was first published in German in 1917.

⁷ In the novel, Elizabeth Costello, herself a novelist and the narrator's mother, gives a series of lectures about animals at Appleton College; the section on Kafka, Köhler and others is in the first lecture she gives, where she also compares herself to Red Peter in Kafka's story. A footnote on page 27 indicates an alternative source for Kafka's story.

subjective perception of the experiments in which he is forced—as a captive—to participate:

‘Sultan knows: Now one is supposed to think. That is what the bananas up there are about [Köhler hung bananas from the ceiling out of reach to see whether the apes could figure out how to use crates to reach them]. The bananas are there to make one think, to spur one to the limits of one’s thinking. But what must one think? One thinks: Why is he starving me? One thinks: What have I done? Why has he stopped liking me?... Even a more complicated thought—for instance: What is wrong with him, what misconception does he have of me, that leads him to believe it is easier for me to reach a banana hanging from a wire than to pick up a banana from the floor?—is wrong. The right thought to think is: How does one use the crates to reach the bananas? ...

At every turn Sultan is driven to think the less interesting thought. From the purity of speculation (Why do men behave like this?) he is relentlessly propelled toward lower, practical, instrumental reason....’ (Ibid. 28-29)

In drawing attention to Lacan’s ethological sources, Dylan Evans suggests that Lacan was an early proponent of comparative scientific behavioral studies of humans and non-humans (which, in the domain of psychology and evolutionary biology, only began to be well established in the West around World War II), and based some of his analytic understandings of human development on evidence from studies of non-human animal development and behavior (2005). This is also, as mentioned, a more or less silent premise of the neuroscientific studies that inform neurohumanism and lends perhaps an additional irony to the “humanism” in neurohumanism insofar as it is founded upon, and represses, unfree non-human animal labor.⁸

In “The Mirror Stage” Lacan cites the mimetic representational effects observed in birds and insects:

The experiment nevertheless acknowledges that it is a necessary condition for the maturation of the female pigeon’s gonad that the pigeon see another member of its species, regardless of its sex; this condition is so utterly sufficient that the same effect may be obtained by merely placing a mirror’s reflective field near the individual. Similarly, in the case of the migratory locust, the shift within a family line from the solitary to the gregarious form can be brought about by exposing an individual, at a certain stage of its development, to the exclusively visual action of an image akin to its own, provided the movements of this image sufficiently

⁸ See Bruce Holsinger on the implication of Western culture (corresponding to the parchment culture of the Middle Ages) in animal slaughter (2009).

resemble those characteristic of its species. (2002, 5; translation of 1966, 95)⁹

This passage raises intriguing questions for those interested in mirror neuron learning and its applications to reading (see Jenson and Iacoboni, 12-13). For example, is gender an issue in embodied mimetic learning? And further: does the observed object have to be human and, if not, does focalizing, or liberated embodied simulation, work equally well—and in similar fashion—when the characters of a novel are not human? For Lacan, these moments carry profound implications on a species-wide level; in other words, in each case, what the animal is learning is how to be a member of its species and how to be part of a social collective. It would have been interesting if Lacan had spelled out in detail here the correspondences between these examples and the becoming-human of humans. The mirror-stage proper focuses, rather, on a dyadic relation; it will require language, and the Oedipus complex, for the young animal's ego to fully enter into the sociality of being human.

Although he clearly drew on cognitive neuroscience and cognitive and behavioral psychology, Lacan did not use them exclusively to arrive at his conclusions, for both *méconnaissance* (misrecognition) and language (the Symbolic)—phenomena not addressed by the normative biological and psychological studies of his day—were crucial elements in what Lacan believed distinguished the subjectivity of human beings in and beyond the mirror stage. So, for example, he shares Roger Caillois's critique of adaptive models of mimicry in insects (for defensive or offensive purposes) (Caillois, 2003, 91-103). Caillois theorized a sort of "death drive" on the part of insects who come to resemble their environments and backgrounds to such an extent that they are often mistaken by each other for the foliage they resemble; he thus posited a kind of "legendary psychasthenia" on the part of these insects, an inability to distinguish between figure and ground or, in Lacan's words, "[Caillois] subsumed morphological mimicry within the derealizing effect of an obsession with space" (2002, 5; translation of 1996, 96). Caillois, like Lacan, was influenced by surrealism, and both occasionally reversed the direction of studies that proceeded from the observation of a physical non-human animal phenomenon to hypotheses about the human to speculate about non-human animal behavior on the basis of what they knew philosophically, psychoanalytically and literarily about humans. They did this in order to explain, not normative states of being, but what is fantastic, i.e. surreal, at the heart of being itself, whether human or not. For Lacan, what is crucial is that the mimetic representation triggered by the mirror stage is the visual capture of a subject in space that takes the form of a drama; because of the child's motor insufficiency (the "specific prematurity of birth," or "foetalization" mentioned earlier) and the non-correspondence between the image and the experienced self, the subject "caught up in the lure of spatial identification, turns out [*machine*] fantasies that proceed from a fragmented image of the body to what I will call an 'orthopedic' form of its totality—and to the finally donned armor of an alienating identity that will mark his entire mental development with its rigid structure" (2002, 6; translation of 1966, 97). Thus, in Lacan's theory of embodied simulation or mimetic representational learning, the

⁹ In *Écrits* (2002, 319), Bruce Fink notes that Lacan's sources for this are British zoologist Leonard Harrison Matthews (on pigeons) and French biologist and entomologist Rémy Chauvin (on locusts).

visual dimension of the process is precisely what produces a subjective unreliability (a fantasmatic reality) that is initially constitutive of both subjectivity and intersubjectivity and that, he will argue, also marks the relationship to others as aggressive. Language, or the Symbolic, is what will temper this fantasmatic relation to the self and others through a mediating third term. It would be interesting to understand, in neurocultural or neurohumanist terms, how the specifically visual register of the mimesis they describe shapes the embodied knowledge produced through mirroring. For Lacan, it is a fraught and dangerous moment that definitively structures aspects of the way humans imagine others and ourselves. In literary studies—thanks in particular to some of the insights provided by Lacan and the poststructuralism whose death both these essays seem perhaps over-hastily to proclaim—we have come to be suspicious of reflectionism as the basis for a reliable kind of knowledge. In part for this reason it is important to recognize that reading is not the same as seeing, but something other, something involving the way language intervenes in the primordial dyadic drama of the subject and his reflection.

Lacan's prose also resonates with centuries of mythical, cultural, philosophical, religious and literary intertextuality, and raises, for those interested in applying neuroscience to the study of literature and humanist cultural artifacts more generally, questions about how to account for language's discursive self-referentiality, its web or network of signification that carries with it other texts and other times, its figurality and its rhetoricity. The story of Narcissus from Ovid's *Metamorphoses*, another tale of fatal reflectionism, shimmers within the "Mirror Stage" and warns with equal vigor against epistemological reliance on a visual apprehension and embodied imitation of a more perfect other self (cf. Ovid 1994, III. 339-510). The story also cleverly inscribes the difference language makes through (the) Echo, that repetition with a difference—a difference Ovid genders—that can only be enacted in a linguistic or acoustic medium. This narrative thus offers an alternative to reflection and identity—an alternative we might call intersubjectivity—and a metatextual commentary on the limits of mirroring. The further (implicit) juxtaposition of Narcissus's fatal moment of understanding—"iste ego sum: sensi, nec me mea fallit imago" (III. 463; Oh, I am that one! I have felt it, I know now my own image)—with the sacred pronouncement, "Thou art that"—the Sanskrit "Tat tvam asi" of Hinduism from the *Chandogya Upanishad*—also creates an echo chamber and inserts psychoanalysis into a prophetic/poetic scriptural tradition of the self, poised on a threshold between life and death. As Lacan puts it:

In the subject to subject recourse we preserve, psychoanalysis can accompany the patient to the ecstatic limit of the 'Thou art that,' where the cipher of his mortal destiny is revealed to him, but it is not in our sole power as practitioners to bring him to the point where the true journey begins. (2002, 9; translation of 1996, 100)

This too, is an approach to the intersection of nature and culture in the "human condition."

I have wanted to comment on some of the ways that a tradition situated between humanities and social and neurological sciences—psychoanalysis—approaches a

phenomenon resembling the affective embodied mirroring the authors of “Literary Biomimesis” and “How Stories Make Us Feel” explore, and to problematize, via Jacques Lacan, the medium of the visual as a vector of embodied knowledge about the self and others. I also wanted briefly to think about the ways literature, or perhaps language more expansively, maintains a certain autonomy with respect to this way of knowing and presents us with the challenge of addressing its specificity as a peculiar naturecultural¹⁰ property of human animals, a specificity that probably cannot be described in biomimetic terms alone. Or rather, one might say that literary theory, literary criticism, or simply writing about texts is precisely the effort to performatively represent the cognitive and affective, biomimetic, properties of written/literary language from within the medium.

But finally I wanted to raise an ethical question related to the return of “humanism” in the environs of an interdiscipline that makes such extensive use of the non-human to understand its subject matter. Jenson and Iacoboni make the point that “it is probably erroneous to identify the human with any single quality or quantity at all.... An ‘only us’ methodology is inherently suspect of harboring human-centric bias that allows us to view the world according to static anthropomorphic criteria” (9). They conclude this discussion with an argument against human exceptionalism:

The making of the human is not about finding accurate measures of something corresponding to the human, not even about highlighting values targeted as human, but about understanding the histories and epistemologies framing human communities, their needs, their pitfalls, their futures. (Ibid.)

Correspondingly, their prioritization of “neurobiological technologies of executory representation and motor intersubjectivity” (ibid.) does not seek necessarily to erect a new humanism in the place of the old, but rather to bring literary representation within the fold of a biologically (and non-linguistically?) based description of human activity at the intersection, rather than separation, of nature and culture. Wojciehowski and Gallese, in their impressive thumbnail sketch of fifty years of developments in the humanities, social sciences and sciences related to these questions, argue that “humanism is renewing itself...outside the humanities” (5). The point for them is the question of whether “cognitive neuroscience can shed new light on the most distinctive aspects defining the human condition, like art, creativity, and aesthetics” (9), thus at least implying an exceptionalist attitude, even as the approach is also comparative across species. Both articles remain optimistic about the degree to which attending to the neurosciences in humanistic studies can open up new vistas of understanding, create collaborations, and, above all, perhaps, “explore the common ground that is embodied experience” (27). Both of the essays also invoke the role of empathy, a word describing, roughly, an intersubjective connectivity that allows us, in Jenson and Iacoboni’s terms, to get beyond egotistical perspectives and “access...other mental lives from the confines of our own cognitive apparatus” (13). Wojciehowski and Gallese say, for example, that “our capacity

¹⁰ For the term “natureculture,” see Haraway (2003, 1-5).

to empathize with others (indeed, a classic topos of humanist thought) is most likely mediated by...embodied simulation mechanisms” (14). And yet, like the “old” humanism whose travails the latter chart in detail, these approaches mention—and then repress?—the founding naturecultural violences of the disciplines whose discoveries they celebrate.

Jenson and Iacoboni most directly address this when they speak to the difficulties of comparative neuronal testing, the problem of mapping ensemble neuronal activity on the one hand, and single cell recording on the other (1). The image of rhesus monkeys with electrodes inserted into their brains, or the imagined scene of “unanesthetized animals [lying] still for a long period in a loud, cramped machine” (1) to give humans the evidence we need about mirror neurons, embodied simulation and, ultimately, empathic imagination suggests that humans may be missing an opportunity to understand something about the limits of mirroring relations. Jenson and Iacoboni do, however, point to a more hopeful laboratory situation (attributed to Gallese’s research) that would involve all participants, human and non-, in the experiments that teach us about embodied cognition (3).¹¹ Perhaps these sorts of experiments will attune humans to the objectifying violence they practice on other embodied minds. The literary experiments I have mentioned in the course of this essay, by Kafka, Coetzee, and others (for example, Ursula Le Guin’s fabulous account of a possible rat-like experimental subject in the short story “Mazes” [1987, 61-66]), affectively imagine subjectivity across species using the powerful technology of language.

There have been some interesting recent glimmers of a popular cultural awareness of the costs borne by non-humans, especially rhesus monkeys. The movie *Contagion*, for example, a story of a hybrid virus that threatens to devastate the global human population within a very short period of time, both invokes and features rhesus monkeys as the sacrificial beings upon which our improved survival is based (2011). One scientist mentions early on that, in order to find the vaccination, many rhesus monkeys will have to die. The visual recognition technology that structures an audience’s embodied affective identification pauses on the scene of a virus-infected dead rhesus in a cage, curled into human-resembling fetal sleep with head gently cradled on folded hands. Later, the contemplatively peaceful live rhesus sitting up in his cage prompts the researcher to inject herself with the now reliably safe anti-viral serum. If neuroscience can learn from these (post-)humanistic endeavors—if the collaboration can indeed work both ways—then perhaps imaginative embodied simulation offers humans a way toward acknowledging, and mitigating, the violence humans practice on others for the sake of human knowledge.

¹¹ See the extraordinary work of the philosopher and psychologist Vinciane Despret, who argues for new approaches to laboratory experimentation that involve all the participants in the laboratory as actors and agents (2004, 111-34).

Bibliography

- Anzieu, Didier. 1989. *The Skin Ego*. Translated by Chris Turner. New Haven, CT: Yale University Press.
- Butler, Judith. 1997. *The Psychic Life of Power: Theories in Subjection*. Stanford, CA: Stanford University Press.
- Cailliois, Roger. 2003. *The Edge of Surrealism: A Roger Cailliois Reader*. Translated by Claudine Frank and Camille Naish. Durham, NC: Duke University Press.
- Coetzee, J.M. 1999. *The Lives of Animals*. Princeton: Princeton University Press.
- Contagion*. 2011. dir. Steven Soderbergh. USA/UAE: Warner Brothers Pictures.
- Derrida, Jacques. 2008. *The Animal That Therefore I Am*. Edited by Marie-Louise Mallet, translated by David Willis. New York: Fordham University Press.
- Despret, Vinciane. 2004. "The Body We Care For: Figures of Anthro-zoo-genesis." *Body & Society* 10 (2-3): 111-34.
- Evans, Dylan. 2005. "From Lacan to Darwin." In *The Literary Animal: Evolution and the Nature of Narrative*, edited by Jonathan Gottschall and David Sloan Wilson, 38-55. Evanston, IL: Northwestern University Press.
- Freud, Sigmund. 1960. *The Ego and the Id*. Translated by Joan Riviere, edited by James Strachey. New York: Norton
- Haraway, Donna. 2003. *The Companion Species Manifesto: Dogs, People, and Significant Otherness*. Chicago: Prickly Paradigm Press.
- Holsinger, Bruce. 2009. "Of Pigs and Parchment: Medieval Studies and the Coming of the Animal." *PMLA* 124: 616-23.
- Kafka, Franz. 1971. *The Complete Stories*. Edited by Nahum N. Glatzer. New York: Schocken.
- Köhler, Wolfgang. 1947. *Gestalt Psychology: An Introduction to New Concepts in Modern Psychology*. New York: Liveright.
- . 1956. *The Mentality of Apes*. Translated by Ella Winter. London: Routledge & Kegan Paul.
- Lacan, Jacques. 1966. *Ecrits*. Paris: Seuil.
- . 2002. *Ecrits: A Selection*. Translated by Bruce Fink. New York: Norton.
- Le Guin, Ursula. 1987. "Mazes." In *Buffalo Gals and Other Animal Presences*, 61-66. New York: Penguin.
- Ovid. 1994. *Metamorphoses, Books I-VIII*. Translated by Frank Justus Miller. Cambridge, MA: Harvard University Press.
- Pico della Mirandola, Giovanni. 1998. *On the Dignity of Man*. Translated by Charles Glenn Wallis. Indianapolis, IN: Hackett.
- Prosser, Jay. 1998. *Second Skins: The Body Narratives of Transsexuality*. New York: Columbia University Press.
- Wallon, Henri. 1984. *L'enfant turbulent*. 2nd ed. Paris: Presses Universitaires de France.