Organisms and Objectifications: A Historical-Materialist Inquiry into the "Human and Animal" Joseph Fracchia University of Oregon

In order to respond to the problem addressed by this volume, I must reformulate its title, "Defining the Human and Animal," by replacing the conjunctive 'and' with 'as'. Because this essay is based on the not too far-fetched assumption that Homo animal species, it addresses the question of defining human as animal. To do so, it takes its cue from an offhand, never systematically elaborated statement by Karl Marx that, by taking the body seriously, situates human beings in the animal world, namely: "The first fact to be established for historical theory is human corporeal organization" (and fully in keeping with Marx's-and Darwin's—logic, that the same is true for the history of all species). The way in which any organism, humans included, negotiates, inhabits, and transforms its world is inextricably linked to its corporeal organization. Accordingly, rather than attempt to define the human and animal, my concern is with the question of the relation between an organism's corporeal organization and the history of its 'objectifications', that is, how each organism. Homo sapiens included, makes worlds in its own bodily image. This historical-materialist inquiry into the 'Human as Animal' will therefore be developed in two parts. This essay will first outline historical materialism as a corporeal turn by situating it in relation to the mainstream of the Western philosophical tradition and to Darwin's materialist conception of natural history. Then, through an elaboration of the concept of Vergegenständlichung/objectification, it will consider history as world-making – a labor common to all organisms, but certainly unique in Homo sapiens.

Joseph Fracchia is a Professor Emeritus of History in the Clark Honors College at the University of Oregon. His major areas of study are European intellectual history and historical theory.

Introduction: A Title and its Dilemmas

The title of this volume, "Defining the Human and the Animal," raises for me two problems that require its reformulation. The first problem pertains to the syntactically conjunctive "and" that serves semantically to separate the "human" from the "animal". Notwithstanding what I would call "ultra-constructionist" claims, most succinctly summarized by Anthony Synnott's insistence that "the body social [or cultural] negates the body physical"(5), the differentiation implied by the formulation, "defining the human and animal," begs a not irrelevant biological question, namely:

is not "the human," *Homo sapiens*, also an inhabitant of the animal kingdom; are human beings not, to paraphrase Nietzsche, "animal, all too animal?" And Nietzsche would certainly have grasped the irony by Linnaeus's somewhat sardonic, if not wholly misanthropic choice to give the epithet "sapiens" to the genus *Homo*: in what was clearly intended as an insult, he set his conspecifics firmly in the animal kingdom by baptizing humans with the same epithet he attached to ape species, *Simia sapiens* (Broberg 175-76).

Despite Linnaeus's view of the biological affinities of apes and humans, and although we are easily surprised, shocked, stunned, delighted and/or bemused by the corporeal resemblances between our species and the "higher primates," no visitor to a zoo would mistake any of the great apes for a human being. This is because of an unmistakably human corporeal form—a "universal," i.e., a *species-specific corporeal form* that is immediately recognizable as human—regardless of age, sex, or race, regardless of the particular cultural meanings with which it has been inscribed, the disciplinary practices to which it has been subjected, and the culturally specific thoughts that it carries around in its head. At the same time, however, what enables us to recognize that creature as human is precisely that which it shares with other animal species, namely: *corporeality*. If we accept the obvious point that *Homo sapiens is* an animal, then we must reformulate the question to "defining the human *as* animal."

If this seems belaboring the obvious, it is worth recalling Stephen Jay Gould's warning that "no biases are more insidious than those leading to the neglect of things everyone knows about in principle" (289). *Insidious* may be too strong, but the reference to familiarity breeding neglect is certainly *apropos*. For there have been rather few serious attempts in mainstream Western philosophy and "human sciences" to give the body its full due. Since Socrates, philosophy has differentiated the human *from* animals on the basis of the mind, while dismissing the body as the *merely animal* dimension of human being. Socrates stated unequivocally that the body "fills us with loves and desires, diseases and fears, with all sorts of fancies and a great deal of nonsense" that it is the cause of all error, misery, unhappiness, and

war, and that therefore the mind could only find truth after death liberates it from its corporeal incarceration. And Hegel's magnificent reconstruction of the intellectual odyssey of *Geist* presents the maturation of the mind from *Sinnlichkeit* to *Vernunft*, as a systematic purging of all bodily traces—which culminates in hypostasizing the history of philosophy as "properly human" history. The persistence of this philosophical privileging of the human mind, while neglecting the animal body, lends tautological profundity to Hegel's insistence that "all philosophy is idealism," and some credence to Alfred Whitehead's observation that all Western philosophy "consists of a series of footnotes to Plato" (39).

Taking the body "seriously" must mean more than treating it as the mind's unruly bearer. And it must mean more than the reduction of the body to a *passive* site, whether for thinking, or awaiting inscription or discipline, or a site where a prepackaged cultural script is performatively enacted. Though the body has long been the object of much attention, that attention has been of the kind that briefly calls it to center stage only in order quickly to dismiss it. What Marx said of political economists' treatment of "use-value" is overwhelmingly true of treatments of the body by the Western philosophical mainstream and also all variations on Synnott's claim that the body social negates the body physical, namely: they reduce corporeality to a "simple prerequisite" in order summarily to neglect it.²

If situating humans in the animal kingdom responds to the first dilemma and helps explain the term "organisms" in *my* title, then my response to the second problem helps situate its other term, "objectifications"/*Vergegenständlichungen*. This concerns the task of *defining* to which the title of this volume refers. Most appropriate here is another example of tautological profundity, Nietzsche's aphorism that "all concepts in which an entire process is semiotically condensed resist definition; definable is only that which has no history" (Nietzsche, Basic Writings 516). This, I contend, applies not just to semiotic, but to all historical processes. Thus rather than attempt to *define* the human *and* the animal, my concern is with the question of the relation between an organism's corporeal organization and the history of its "objectifications," that is, how each organism, *Homo sapiens* included,

makes worlds in its own bodily image. This historical-materialist inquiry into the "Human as Animal" will therefore be developed in two parts. I will first outline historical materialism as a corporeal turn by situating it in relation to the mainstream of the Western philosophical tradition and to Darwin's materialist conception of Then, through elaboration natural history. an of the concept of Vergegenständlichung/ objectification, I will consider history as world-making—a labor common to all organisms, but certainly unique in *Homo sapiens*.

Historical Materialism as a Copernican Turn and Breathtaking Wager

When first outlining his materialist conception of history, Marx made what initially seems an offhand and parenthetical comment; he noted; "the first fact to be established for the study of history is the corporeal organisation of human beings and their consequent relation to the rest of nature." 3 Unfortunately, he never systematically elaborated why human corporeal organization should be considered the "first fact" of history. But this striking statement is, in my view, perhaps the single most insightful comment he ever made - and certainly the one with the most farreaching implications. For it condenses in one sentence both what Marx alluded to as his Aufhebung (transcendence, sublation) of philosophy and also the fundamental principle of a materialist conception of history. Though Freud excluded it from his list of mind-shattering Copernican revolutions in Western intellectual history that displaced humans from the center of the universe (which he limited to Copernicus, Darwin and, modestly, himself), I agree with Foucault that Marx belongs among the major initiators of the project of decentering the subject. I contend further that Marx's positing of human corporeal organization as the first fact of human history amounts to a Copernican upheaval - precisely because, as I shall explain below, it is the human complement to Darwin's approach to animal organisms in general.

The Copernican dimensions of Marx's historical materialism lay in the corporeal challenge that it posed both to the Western philosophical tradition – and to itself. The immensity of that challenge is best conveyed by Terry Eagleton's summary of Marx's project: "What if an idea of reason could be generated up from

the body itself, rather than the body incorporated into a reason which is always already in place? What if it were possible, in a breathtaking wager, to retrace one's steps and reconstruct everything—ethics, history, politics, rationality—from a bodily foundation?" (197). At first glance, "breathtaking" seems a polite understatement for this wager, and "audacious" or "foolhardy" more appropriate. For, in addition to the breathtaking immensity of the project, the attempt to rethink "everything" from a "bodily foundation" is, as Eagleton warns, necessarily "fraught with perils: how could it safeguard itself from naturalism, biologism, sensuous empiricism, from a mechanical materialism or false transcendentalism of the body every bit as disabling as the ideologies it seeks to oppose? How can the human body, itself in part a product of history, be taken as history's source? Does not the body in such an enterprise become simply another privileged anteriority, spuriously self-grounding?" (197).

Marx did not win his wager, of course. But his failure to win was not, in my view, a result of having succumbed to any of the perils Eagleton noted. I would argue that he navigated successfully between the traps of false universalism and arbitrary eclecticism. His failure to win resulted rather from the monumentality of his wager – which was, and remains, a wager that no single individual could possibly win. Marx himself did little more than scratch the surface; but he did so in extremely suggestive, paradigmatic ways. The Copernican significance of his attempt to ground human history in human corporeal organization is best illuminated by situating his materialist conception of history in contrast to traditional philosophy's idealist anthropology and in relation to Darwin's materialist conception of natural history.

Positing corporeal organization as the foundation of human history required rethinking the subject-object relation as conceived by the philosophical tradition. To do so, Marx embarked on a path marked out by Ludwig Feuerbach who rejected the idealist anthropology of what he called "the old philosophy." The "old" philosopher insisted: "I am an abstract, an only thinking being; the body does not belong to my essence." Feuerbach's "new philosophy," however, began with the materialist claim:

"I am a real, a sensual being: The body belongs to my essence; the body in its totality is my self, my essence itself" (Feuerbach 3:302).⁴ By restoring the body to the human essence, Feuerbach redefined the subject/object relation as one between sinnlich-tätige subjects and the object(s) of their activity. Yet despite the corporeal twist he gave to the subject-object relation, his narrow focus on exposing the bodily roots of philosophy and theology limited his change of direction to a corporeal curve: his turn toward the body did not go beyond treating it as a site for thinking, a "simple prerequisite"; ultimately, he portrayed the human being as only embodied mind.

Marx agreed with Feuerbach's reconceptualization of the subject-object relation as that between sensually-acting subjects and the objects of their activity. However, because he viewed corporeal organization not just as a site of thinking. but as the "first fact" of history, he grasped the matter more radically by its corporeal roots. The focus on the corporeal organization of sensually acting subjects does not preclude consideration of the mind, nor of the bodily site from which it thinks; but it also requires consideration of the entire array of corporeal attributes that both demand and enable humans to act in a variety of ways, yet within the range of corporeally-established limits. This rethinking of history "up from the body" points beyond the somewhat decentered, but nevertheless still idealist notion that we are "embodied minds." It begins, rather, with the assumption, aptly formulated by Maxine Sheets-Johnstone, that we are "mindful bodies" (451-66). In a corporeal witticism appropriate for terrestrial, bipedal creatures, Marx summarized his break with Philosophie überhaupt by quipping that he had turned the upside-down Hegel rightside up and put him on his feet. This quip explains in graphic shorthand Marx's claim that his corporeal redefinition of the subject-object relation amounted to an Aufhebung of philosophy; and it chronicles his move from "embodied minds" to "mindful bodies" that bent Feuerbach's curve into a full corporeal turn.

To complete his corporeal turn and establish the foundation for a materialist conception of history, Marx considered more thoroughly the kinds of activity indulged in by the sensually acting human subject with its peculiarly human corporeal organization. Focusing on the entire array of human corporeal capacities, he did not

limit the scope of human activity to the realm of philosophy and theology. He reflected more broadly on how human beings, in a wide range of socio-culturally specific ways act in, and *on*, thereby transforming, the world; that is, to borrow from Nelson Goodman, he reflected on human "ways of world-making" (Goodman, title of book).

To express this transformative activity, Marx adopted, and gave broader and deeper corporeal content to, another Feuerbachian category: *Vergegenständlichung* or objectification.⁵ Developed as a materialist counter to Hegel's idealist notion of *Entäusserung* (externalization), *Vergegenständlichung* is the crucial historical-materialist category that depicts the interaction of human beings with the world,—that links human corporeal organization to the worlds of artifacts that humans produce. Specifically, it refers to the ways in which humans work over, rework, and transform the given into human worlds made in the image of their own bodily form, capacities, limits, and practices. As I shall explain below, objectification need not be thought of as an exclusively human activity; but for now my concern is with human beings and the particularly human modes of objectification.

Because Marx, in his life-long attempt to decipher the social hieroglyphics of capital, most often used objectification to refer to labor, it is all too common in Marx-interpretation to conflate objectification *with* labor. It must therefore be emphasized that although he *adapted* Feuerbach's category to apply *also* to labor, he did *not* limit it *only* to labor. Objectification is not the mode of labor; rather labor is one mode of objectification. This is evident throughout his *Economic-Philosophical Manuscripts of 1844* where he deployed the term more broadly, often with brilliantly insightful brevity, to a variety of other human activities including: sense perception, speech and language, knowledge production, and social relations, both public institutionalized relations and more personal social ones such as love and friendship.

There is no time to elaborate this in detail, but by re-reading and re-organizing what Marx referred to as the "moments of history", I have categorized the various activities of the sensually acting subject under three general modes of objectification definitive of human being and history. I should warn that there is a bit of a

conceptual muddle in my categorization, for although I use the terms "material" and "semiotic" to name two of the modes, all three are very much material activities, and all three are very much signifying activities. These are:

- Material objectification—usual notion of labor, making material objects. Because labor, as Terry Eagleton put it, "works nature up into human meaning" it is a "signifying activity" (Marx, 232).
- Semiotic Objectification, the production and use of signs that invest the things of the world with meaning. Also a very material activity: the "agitation of layers of air" by the supra-laryngeal tract to form what Susanne Langer referred to as "those mouthy little noises we call words", or in writing, the movements of the hand that leave scribbles on a page, both of which express, or objectify, our thoughts (61).
- Social objectification: the organizing of social relations, both public and more personal; and whether formally (e.g. a constitution, marriage) or performatively by establishing a set of social practices. The making of social order is obviously both material and meaningful.

Here there is only space to address one of these three modes as practiced by both humans and other animal species, namely: material objectification. First, however, I will elaborate more fully what "corporeal organization" has to do with understanding the relation between *Homo sapiens* and other animals through reflection on the relation between Darwin's and Marx's materialist conceptions of, respectively, "natural history" and "human history".

Although clearly "biased" as Marx's closest friend and co-author, Engels was not incorrect in eulogizing Marx as having done for human history what Darwin accomplished for natural history. But, I would add, this is not simply, as Engels implies, a matter of equal status in diverse disciplines; rather, together these two thinkers show that human natural history is not just a "simple prerequisite" of human history, but that human natural history, objectified (see below) in corporeal organization, fundamentally, if by no means exclusively, *in-forms* human history.

In a comment (1845) that can retrospectively be taken as an anticipation of Darwin, Marx noted, "We recognize only one single Wissenschaft, the Wissenschaft of history. History can be observed from two sides, it can be divided into the history of nature and the history of human beings. Both sides are however inseparable; as long as human beings exist, the history of nature and the history of human beings mutally condition [bedingen] each other." 6 Having thus established a unity in difference of the natural and social/human sciences. Marx greeted the publication of Darwin's Origin of Species (1859) as "the book that contains the natural historical basis for our view." 7 Marx did object to Darwin's excessive reliance on the Malthusian notion of the "struggle for survival;" he was amused that Darwin discovered "among the beasts and plants" a mirror of the struggle for economic survival in his own capitalist society; and he found Darwin's "English writing style" rather "crude." But he was nevertheless convinced that Darwin had made possible the bridging of the gap between a materialist conception of human "natural history" and a materialist conception of human history, that he had made possible the development of a single Wissenschaft with two distinct, but corporeally related dimensions.

The affinities between Darwin's conception of natural history and Marx's conception of history lie in their unabashedly materialist focus on corporeal organization. As the foundation of peculiarly human modes of objectification, human corporeal organization can thus be conceived as the mid-point and link between the two dimensions of history, pointing both "backward" toward the natural history of its evolution, and also forward to the worlds that humans have made for themselves with this corporeal organization. Students of paleoanthropology disagree, often vehemently, in their explanations of human origins—whether the key element in human evolution was bipedality, the opposable thumb, tool making, the sharing of food and sociability, the larger brain, or language and culture. Nevertheless, they all focus on the emergence of the uniquely human corporeal organization; and they all recognize the evolved human body as the source of *Homo sapiens*' unique social and cultural capacities. The emergence of human corporeal organization is at once

the last fact of human natural history and the first fact of historical materialism, that approaches human histories "up from the body."

A word here to avoid reductionism: however essential the natural history of human corporeal organization is to the study of human history, it cannot *itself* elucidate that history. Sociobiological and cultural evolutionist claims to the contrary notwithstanding, the "biological potentiality" for *the production of culture* and *the actual production of cultures* cannot be conflated. Hence the importance of Marx's insistence on a single *Wissenschaft* consisting of the two closely related, *but nevertheless distinct* dimensions.

A final comment on Darwin and Marx pertains to a methodological affinity in their conceptions of the relation between necessarily abstract theorizing and the study of particular analytical objects. As Darwin well knew, his theories were really only highly educated hypotheses. He too made a kind of "breathtaking wager" providing only the barest foundational outlines of a way of looking at the world and of a research program that no individual could ever exhaust— and one that left many problems unsolved, most notably the explanation of the generational transmission of traits. It would take another century before Ernst Mayr, Ledyard Stebbins and Theodosius Dobzhansky adopted Mendelian genetics to explain that transmission, thereby constructing the "modern evolutionary synthesis" that turned Darwin's hunches into a science of evolutionary biology. Notwithstanding countless deterministic interpretations, Marx too very consciously understood his general theoretical statements about the content and logic of human history as leitmotifs, guiding threads. These guiding threads, he insisted, are "not a grid or schema to be imposed on history. In themselves and apart from specific historical analysis are of no value whatsoever" (MER 155). This means of course that the materialist conception of history is not a closed philosophy of history, but a set of fundamental assumptions outlining what Oskar Negt called "a research strategy" for historical inquiry.⁸ Like Darwin's, Marx's wager is an ongoing one: Just as evolutionary biology had to go far beyond Darwin's foundational insights, so too must a historicalmaterialist Wissenschaft go far beyond Marx's. In the remainder of this exploration

of the human as animal, I sketch the outlines of this single materialist *Wissenschaft* of history with two sides. I will first look at corporeal organization as itself an objectification of an organism's natural history, and then at the kinds of objectifications made possible by an organism's corporeal organization.

Corporeal Organization as an Organism's Objectified Wissenschaft: A Glance at the "Natural History" of Human Corporeal Organization

Reflecting on the relation of corporeal organization and environment, Ernst Mayr "has pointed out time and again that the structure and physiology of any living organism necessarily reflects its evolutionary history" (Lieberman 11). Similarly Konrad Lorenz, who depicts an organism's evolution as a process of absorbing information about the world it inhabits. And he roots this epistemological process in a cognitive apparatus not limited to just the "mind" or even the brain, but consisting rather of the entire body. Evolution, he writes, is an "eons-long process of genesis, in the course of which all organisms have confronted the givens of reality and, as we say, 'adapted' to it;" in this manner, the evolutionary process is "one of *knowledge*" that "produces in the organic system itself actual images of the outside world."9

Lorenz gives the example of the fish whose "motion and the shape of its fins reflect the hydrodynamic properties of water, which possesses these properties irrespective of whether there are fins moving through it or not" (Lorenz, Mirror 6). In general: "Every species of animal and plant has adapted itself to its environment" and therefore is, "in a sense, the image of its environment. The form of the horse's hoof is just as much an image of the steppe it treads as the impression it leaves is an image of the hoof (Lorenz, Introduction, 1-2)." Not just the morphology of an organism, but also its information acquisition devices are, and provide, images of its environment: "The sense organs and central nervous system enable living organisms to acquire relevant information about the world and to use this information for survival. Everything we know about the material world in which we live derives from our phylogenetically evolved mechanisms for acquiring information" (Lorenz, Mirror 6). Reminding that "information" primarily means "giving form" (23), Lorenz

concludes that what an organism learns of external reality is quite literally *in*corporated into, embodied in the organism itself.

Lorenz's claim is, as stated, overly general. Supplying needed qualification, Donald Campbell agrees that an organism's morphology expresses "knowledge" of the environment—but adds that this knowledge is expressed "in a very odd and partial language." He exemplifies this with the great biodiversity of aquatic creatures, all in-formed by the same principles: "The hydrodynamics of sea water, plus the ecological value of locomotion, have independently shaped fish, whale, and walrus in quite similar fashion. Their shapes represent independent discoveries of this same 'knowledge' expressed in similar 'languages.' But the jet-propelled squid reflects the same hydrodynamic principles in a quite different, but perhaps equally 'accurate' and 'objective' shape." He thus concludes that the "thing in itself is always known indirectly, always in the language of the knower's posits, be these mutations governing bodily form, visual percepts, or scientific theories" (Campbell, 85). Neither arbitrary nor determined, the corporeal organization of different species may be viewed as different ways of knowing the same environment, as the oddly expressed, particular rationality of a species objectified in corporeal form.

The information absorbed into an organism's morphology is, to give a materialist twist to Judith Butler's terminology, a performative process of material interaction with its environment "that stabilizes over time (Butler, 9)." What it produces, however, is not what she calls the *effect* of "boundary, fixity, and surface we call matter"(9), but rather the *actual* "boundary, fixity, and surface", that is: the morphology, the anatomy and physiology that make up a species" corporeal organization. This materialization, however, is not just a repeated performance on a supposedly malleable body. It is rather the corporeal organization of a natural body that evolves performatively through the interaction of the organism with its environment. The organism *is* its evolutionary history objectified; and its corporeal organization is literally objectified knowledge of its environment, *a body of knowledge*, a corporeal *Wissenschaft*. To adapt Marx's description of technology to

the body's "natural technology:" corporeal organization may be read as "an open book" (MER 89) of an organism's knowledge of its environment.

In addition to signifying a "body of knowledge", the term *Wissenschaft* also refers to the pursuit of knowledge. Lorenz extends this sense of the term to the "cognitive apparatus" embedded in an organism's corporeal organization. Invoking a qualified "realist" epistemology, he insists that a species' "cognitive apparatus is itself an objective reality which has acquired its present form through contact with, and adaptation to, equally real things in the outer world" (Lorenz, Mirror 7).

The "realism" and the species-level "universality" of this line of reasoning does not entail a reductive explanation of the culturally variable contents of human consciousness as products of natural selection. The claim is not that there is one human reality and one human "Truth;" but rather that there is one species-specific set of mechanisms for knowledge production. What he metaphorically calls the peculiarly human "spectacles of our modes of thought and perception" provide meaningful knowledge of the world. This knowledge will be formulated by humans in culturally variable ways that may be in some ways incommensurable but by no means limitless. Lorenz's reflections, in short, delineate the outer limits of our cognitive apparatus: "What little our sense organs and nervous system have permitted us to learn" has proved efficacious; and we may "trust" that knowledge "as far as it goes." But, he hastens to add, that is not very far: "For reality also has many other aspects which are not vital for us, and for which we have no 'organ,' because we have not developed the means of adapting to them. We cannot hear what is transmitted on wavelengths inaccessible to our receiving apparatus, nor can we know how many such wavelengths there are." "We are," in short, "limited." 10 Translated into contemporary terms: because of the knowledge objectified in their corporeal organization, and also that acquired by the cognitive apparatus embedded in their corporeal organization, all sensually-acting creatures are always already knowing subjects, and always already decentered ones.

Objectifying Labor and Human Species-Being: World-making

If all organisms are, by virtue of their corporeal organization, sensually acting, objectifying subjects, then the differences among them and the worlds they build must be sought there as well. In what could be viewed an anticipatory interrogation of the title of this conference, Marx insisted that human beings, like all other animals, are "species-beings," that is: all human beings share the definitive attributes of their species. And like that of other animals, human "species-life consists physically in the fact that human beings live from nature" (MER 75).

Having thus established the kinship between *Homo sapiens* and other animals, Marx then contrasts human species-being with that of other species on the basis of the quantity and quality of their objectifying capacities: "One can differentiate human beings from animals on the basis of consciousness, religion or what one will. Humans *themselves* begin to differentiate themselves from other animals once they begin to produce their means of life;" and, he adds emphatically, this "step is made possible by their *corporeal organization*" (MER 76). Marx readily acknowledges that other animal species also *produce*: they "build nests, houses, like the bee, beaver, ants." But they "only produce what they immediately need for themselves and their offspring;" they produce "one-sidedly," "only under the dominion of immediate physical need" (MER 76).

Homo sapiens, however, is not so limited, or better: human natural limits can be artificially expanded. In contrast to the "one-sided" production of other animals, the human animal produces "universally." Because universalist claims are easily abused, and because Marx is clearly speaking of the "relative universality" of humans vis-à-vis other species, I will replace universality with multi-dimensionality. Human multidimensionality contrasts in three ways with the one-dimensionality of other animals.

First: The multi-dimensionality of human production derives from the productive capacities embedded in human corporeal organization—the instruments, capacities, and dexterities embedded in the species-specific body that enable human beings to *make* that which is necessary to satisfy their needs and wants. Whereas other animals "produce only according to the measure and needs of their

species," human beings learn to produce "according to the measure of every species" (MER 76) — which simply states the obvious fact that humans can produce as artifacts that which "immediately belongs to the physical body" of other species (clothes as artificial skin) and can learn to make things to do what other species do instinctually" (winged vehicles to fly).

Second, the multi-dimensionality of human productive capacities enables human beings to "make all nature into their *extended* body, both insofar as nature is an immediate means of life, and insofar as it is the material, the object, and the tool of human life activity" (MER 76). With the corporeal instruments and imagination to turn nearly everything into objects of their productive objectification, human beings "produce in freedom." And because they "know how to produce in accordance with the standard *of every species*," human beings reproduce "the whole of nature" (MER 76).

Lest this emphasis on making be mistaken as advocating a nature-destroying Promethean productivism, it must be emphasized that Marx is simply delineating the qualitative range of human capacities, not advocating the quantity of their employment. And he makes two crucial comments on the qualitative character of production in a society beyond capitalism. One is his appreciation of the potentially aesthetic character of human production. Because humans can, he insists, learn to produce in accord with "the inherent measure of the object," they can learn to produce "according to an aesthetic measure" (MER 76). More fundamentally: This understanding of the relations of humans to nature is the antithesis of a productivist framing of nature exclusively as a natural resource to be endlessly exploited. Viewing nature as "our own extended body" makes graphically obvious that its destruction is tantamount to suicide.

Finally: The productive capacities of a species are also the major determinant of its geographical range. The technological one-dimensionality of other animal species results in the geographical one-dimensionality of their range. The history of non-human species *is* their natural history; and their only responses to qualitative environmental changes are speciation or demise. The "multidimensionality" of

human productive capacities, however, establishes the unique "multidimensionality" of human geographic range. Those multi-dimensional productive capacities enabled the human species to break the boundaries of the "local" African niche of its origins and spread all over the planet, to inhabit virtually all (terrestrial) regions from deserts to polar ice. Whereas Novalis defined philosophy as "homesickness, the wish to be everywhere at home," a materialist conception of history suggests that that homesickness is a particularly philosophical affliction. Through objectifying labor, human beings can produce the artifacts that render hospitable environments to which they are not suited by their corporeal organization alone—and thereby to *make* themselves (almost) everywhere at home.

Up to now I have focused on the contrast between human production and that of other species. But the insistence that other animals also produce raises key questions about the concept of objectification itself. In Capital Marx distinguishes human labor from that of other species by differentiating between the "worst architect" and "the best bee." One English translation has loosely but accurately rendered Marx's specific comparison in more general form: "the architect raises the structure in the imagination, before erecting it in reality."12 This rendering captures the sense of Marx's example, namely that the human labor process is intentional. And John McMurtry is therefore justified in conceptualizing this intentional process of raising a structure in the imagination before realizing it as the "projective consciousness" (McMurtry 22) — which is certainly engaged in all forms of human labor, whether manual, intellectual, aesthetic, or the linguistic labor of speaking/writing. The question here, however, is whether labor is the definitive model for all modes of objectification, which, in turn, depends on the answer to the question of whether this "projective consciousness" is a necessary attribute of objectification.

In Marx's usage not all objectifications are consciously intentional. As noted above, he treats sense perception as a form of objectification; and his insistence that animals "produce" acknowledges their objectifying activity. Yet neither can be considered acts of a "projective consciousness" (the rare examples of rudimentary

tool use in other species excepted). The same is true of such collective products as languages and cultural forms. Except artificial languages like Esperanto and perhaps the work of the "culture industry," languages and cultural forms are not produced with the conscious intentionality of the projective consciousness. But, like beaver dams and spider webs, languages and cultural forms are not simply given, but made; as made-objects they are what Ferruccio Rossi-Landi termed "social pseudo-naturalities." ¹³ Because produced through purposeful activity, even if without conscious intent, languages and cultural forms are objectifications—which means, of course, that the "projective consciousness" is not the definitive attribute of objectification. Objectfication is thus more accurately viewed as those activities through which an organism effects a purposeful and meaningful transformation of some aspect(s) of the world, regardless of whether it is motivated by conscious intention, habit, or instinct.

Understanding objectifying labor as a purposive, if not consciously intentional transformation of environment, and thus as an attribute of all species, provides a comparative perspective for viewing the relation between an organism's corporeal organization and the world or niche it creates for itself; and this is the second issue raised by Marx's discussion of animal production. The anthropo-egocentric 14 tendency to view nature or the environment as everything that is not human occludes the productive processes that go on in "nature." But non-human animals are also the purposeful producers of their albeit one-dimensional worlds; they too engage in their own species-specific objectifying activity that transforms what is, from their perspective, nature; they too build themselves worlds in their own bodily image. Rejecting the un-nunaced notion that (non-human) organisms simply settle in pre-established "niches" in the "environment," Richard Lewontin insists that all species are both the subjects and objects of their own evolution, that is: each species creates its own niche by modifying, according to its bodily capacities and in accordance with its needs, the world outside itself (85-106). The degree of modification certainly varies. As Maurice Godelier summarizes: the qualitative difference between Homo sapiens and other animal species is that unlike human beings, "no other animal species is capable of taking such charge of the objective conditions of its existence" (5). That is, in Novalis' terms: other animal species make themselves somewhere, but not everywhere, at home.

If one views "production", human or otherwise, as a corporeal mode of objectification, one need only cast another corporeally-inclined glance to find, in the made worlds of all animal species, traces of their corporeal organization. And it is precisely because of his historical-materialist insight into the relation between corporeal organization and artifacts that Elaine Scarry referred to Marx as "our major philosopher on the nature of made objects" (179). Marx, Scarry explains, "soberly, often movingly, breaks open the sensuous object—now a table, now a wall of bricks, now a bolt of lace—and finds located in the interior structure of each *our bodies*" (242-43). As she so perfectly puts it, Marx deciphers "the body as the interior structure of the artifact." Objectified in all artifacts is the corporeality of their producers—their species-specific bodily tool-kit, the corporeal capacities and dexterities, and also the needs, constraints, and limits, that collectively establish the range of its objectifications. And the different artifactual worlds produced by different species are all built in an image of their own corporeal organization.

A complete sketch of a historical-materialist approach to made human worlds would require addressing also the two other ways of world-making noted above: semiotic and social objectification. It would require, that is, reading human worlds as the material and meaningful products of all three modes of human objectification, made possible, and also limited, by human corporeal organization. Precisely because of its understanding of made worlds as the material and meaningful products of objectification, historical materialism might be considered a "corporeal semiotics." But that is another topic for another time. For now, to conclude these reflections on the human as animal: like all other animal organisms, *Homo sapiens* is outfitted with a unique bodily tool kit; but unlike all others, human corporeal organization houses an expansive set of corporeal capacities whose objectifications transform the world in multitudes of culturally specific ways. Yet all these diverse

ways of human world-making are unmistakably objectifications of, again to paraphrase Nietzsche, the human, all too human animal.

¹ In Phaedo Socrates launched a rather vehement attack on the body, which he saw as an "imperfection" contaminating the soul, the source of "innumerable distractions" from the search for truth and of diseases, it "fills us with loves and desires and fears and all sorts of fancies and a great deal of nonsense," and "wars and revolutions and battles are due simply and solely to the body and its desires." Consequently, "we are in fact convinced that if we are ever to have pure knowledge of anything, we must get rid of the body and contemplate things by themselves with the soul by itself." Plato, Phaedo, transl. Hugh Tredennick, in *Collected Dialogues*, ed. Edith Hamilton and Huntington Cairns (New York, 1961), 49, 95. See also the "Allegory of the Cave," Republic VII, transl. Paul Shorey, in ibid., 747ff.

² Uwe Steiner emphasizes the difference between Körper and Leib, but although the *Leiblichkeit* of a species cannot be reduced to its Körperlichkeit, it is also inseparable from it. Professor Dr. Monika Unzeitig explains the etymology of the two terms: "*Leib* bedeutet bis vom Althochdeutschen bis ins Mittelhochdeutsche beides: Körper und Leben (z.B. den lîp verliesen: das Leben verlieren; mîn lîp bedeutet als pars pro toto,'ich;'); erst im 13. Jh. wird aus lat. corpus mhd. korper, körper entlehnt." (personal correspondence).

³ Karl Marx und Friedrich Engels. *Marx-Engels Werke*. Vol 3, 20-21. Future references to this source will be cited parenthetically in the text as MEW. The English translation is taken from *Marx and Engels Reader*, 149. Future references to this source will be cited parenthetically in the text as MER. The German "*körperliche Organisation*" is somewhat misleadingly translated as "physical organization."

⁴ My translation.

⁵ In English language usage (esp. in critiques of the "occularcentric" gaze or "male gaze" that "objectifies") "objectification" is generally intended to refer to that which in German would be *Verdinglichung*, reification, turning a person into a thing. While objectification under exploitative conditions can certainly degenerate into reification, the two are by no means synonymous. In Marx's usage, in so far as *Homo sapiens* (or any species) effects a change in that which is given, it is a form of objectification.

⁶ MEW 3:18. In his manuscript Marx crossed out this passage, but it certainly and accurately represents his viewpoint.

⁷ That Marx and Engels judged Darwin's work as a scientific revolution is a constant theme in their writings. In the first volume of *Kapital*, for example, Marx defines the tasks of social theory in terms of Darwin's achievement; noting the lack of any critical work on the history of technology, he refers to Darwin's analysis of "natural technology," "the formation of the organs of plants and animals as instruments of production," and asks rhetorically whether "the history of the formation of the productive organs of social individuals [*Gesellschaftsmenschen*] does not deserve the same attention." (Das Kapital I, MEW 23, 392). Perhaps most well known is Engels's eulogy at Marx's funeral, his evaluation that "as Darwin discovered the law of the development of organic nature, so Marx discovered the developmental law of human history," (Engels, "Das Begräbnis von Karl Marx," MEW 19, 335. similar evaluations: 21/ 3, 357, 481, 280, 295, 505; 22/220; 36/Brief an Kautsky 16 Feb 1884). Less well known but equally telling are several comments in which Marx and Engels mention Darwin in passing, as if it were a foregone conclusion that with Darwin a new scientific epoch had begun. In a letter of June 25, 1864, to Lion Philips, Marx, hoping the latter is in good spirits, wrote that "since...Darwin has proven our common descent from the apes, hardly any shock whatever

can shake "our pride of ancestry" (Marx to Lion Philips, June 25, 1864, MEW 30, 665). And Engels writing to Marx in the midst of his studies for Anti-Dühring, complained of the Berlin physicist and physiologist Hermann von Helmholtz, that he (Helmholtz) allowed a new edition of "the same nonsense that he published before Darwin" to be issued after the appearance of The Origin of Species (Engels, letter to Marx, May 28, 1876, MEW 34, 19). Most interesting, perhaps, are a couple more personal references to Darwin. The apocryphal story that Marx offered to dedicate the second volume of Kapital to Darwin who "gently declined" the privilege seems to have been proven a case of mistaken identity. Despite this particular fiction, certain epistolary references indicate a kind of reverence for Darwin—an attitude not at all common in Marx's and Engels's references to other thinkers. Engels, writing to Bebel, proudly mentions a letter of Darwin. And in his notes for Anti-Dühring, Engels contrasts the target of his polemic to Darwin: "How great the thoroughly modest Darwin appears, who not only brought together, ordered, and analyzed thousands upon thousand of facts from the entire discipline of biology, but also cites his predecessors with joy, even to the dimunition of his own fame..." (Engels, "Materialien zum Anti-Dühring," MEW 20, 576). When the two proud, oftentimes arrogant polemicists Marx and Engels write about someone in this manner and tone, it is clear that they held him in the highest esteem.

- ⁸ Oskar Negt calls attention to Marx's understanding of the materialist conception of history as a "research strategy" in "What is a Revival of Marxism and Why Do We Need One Today" in *Marxism and the Interpretation of Culture*, Cary Nelson and Lawrence Grossberg, eds. (Urbana: University of Illinois Press, 1988), 211-34, esp. 230.
- ⁹ Behind the Mirror 6. Translation altered: Taylor translates *äonenlang* as "age-long" when it is more accurately rendered "eons long". This is a trifle, but more serious is the translation of *in dessen Verlauf sich alle Organismen mit den Gegebenheiten der Wirklichkeit auseinandergesetzt und wie wir zu sagen pflegen angepaßt haben as "in the course of which all organisms have come to terms with external reality" (Lorenz, <i>Die Rückseite des Spiegels: Versuch einer Naturgeschichte menschlichen Erkennens*, München: Deutscher Taschenbuchverlag, 1982), 17). The use of "come to terms with external reality" renders the organism more passive than does "*auseinandergesetzt*" which refers to the confrontations between the organism and the "givens of reality" a process in which the organism, as Levins and Lewontin put it, is not only an object, but also a subject of its own evolution.
- ¹⁰ Lorenz, *Behind the Mirror*, *Behind the Mirror* 7. Lorenz's concluding comment on our literal and metaphorical limitations is not included in the English edition. German edition, p. 19.
- ¹¹ Novalis, cited in Georg Lukács, *Die Theorie des Romans* (Frankfurt: Sammlung Luchterhand, 1971), 21.
- ¹² Cited in John McMurtry, The Structure of Marx's World-View (Princeton, Princeton University Press, 1978), 22. McMurtry cites the English translation of *Capital* by Samuel Moore and Edward Aveling; the generalization in this sentence is in keeping with the examples that Marx provides, though he does not himself provide a general summary of these examples.
- ¹³ Ferruccio Rossi-Landi, *Language as Work and Trade* translated by Martha Adams and Others (South Hadley MA: Bergin & Garvey, 1983), 42. "The naturality of speech is a sociality and is the product of long practice on the part of the individual and of a long tradition of social living. It is a *social pseudo-naturality*".
- ¹⁴ "Anthropcentric" is usually used as a term implying human hubris, the belief that the purpose of the entire world and all of its inhabitants, organic as well as inorganic, are to be subjected to human domination. But from the corporeal perspective developed here, every species is inevitably trapped in, or more positively: formed by, its corporeal organization; thus, humans must be anthropocentric

just as spiders, for example, must be arachnocentric. I therefore use here "anthropoegocentric" to designate that which is usually meant by "anthropocentric".

Works Cited

- Broberg, Gunnar. "Homo sapiens, Linnaeus' Classification of Man." Linnaeus, the Man and his Work. Berkeley: University of California Press, 1983. Print.
- Butler, Judith. *Bodies that Matter: On the Discursive Limits of "Sex."* New York: Routledge, 1993. Print.
- Campbell, Donald T. "Evolutionary Epistemology." *Evolutionary Epistemology, Theory of Rationality, and the Sociology of Knowledge*. Ed. Gerard

 Radnityzky and W.W. Bartley, III. La Salle, IL: Open Court, 1987. 47-89. Print.
- Eagleton, Terry. The Ideology of the Aesthetic. Cambridge, MA: Blackwell, 1990.
- _____. Why Marx Was Right. New Haven: Yale UP, 2011. Print.
- Feuerbach, Ludwig. Werke in sechs Bänden. Frankfurt: Suhrkamp, 1975. Print.
- Foucault, Michel. *The Archaeology of Knowledge and the Discourse on Language.*Trans. A.M. Sheridan Smith. New York: Pantheon Books, 1972. Print.
- Godelier, Maurice. *The Mental and the Material*. Trans. Martin Thom. London: Verso, 1986. Print.
- Goodman, Nelson. Ways of Worldmaking. Indianapolis: Hackett, 1978. Print.
- Gould, Stephen Jay. *Ontogeny and Phylogeny*. Cambridge, MA: Harvard University Press, 1977. Print.
- Langer, Susanne. *Philosophy in a New Key: A Study in the Symbolism of Reason, Rite and Art.* Cambridge: Harvard UP, 1960. Print.
- Levins, Richard and Richard Lewontin, "The Organism as Subject and Object of Evolution." *The Dialectical Biologist.* Cambridge, MA: Harvard UP, 1985. 85-106. Print.
- Lorenz, Konrad. *Die Rückseite des Spiegels: Versuch einer Naturgeschichte menschlichen Erkennens*, München: Deutscher Taschenbuchverlag, 1982. Print.

- _____. Behind the Mirror: A Search for a Natural History of Human Knowledge.

 Trans. Kurt and Helen Wolff. New York: Harcourt Brace Jovanovich, 1977.

 Print.
- Lieberman, Philip. *Uniquely Human*. Cambridge, MA: Harvard University Press, 1991. Print.
- Marx, Karl and Friedrich Engels. *Marx-Engels Werke*. Berlin, DDR: Dietz, 1969. 5-530. Print.
- _____. *The Marx-Engels Reader*. Ed. Robert C. Tucker. New York: Norton, 1978. Print.
- Nietzsche, Friedrich. *Basic Writings of Nietzsche*. Ed. Peter Gay. Trans. Walter Kaufmann. New York: Modern Library, 2000. Print.
- Plato. *Collected Dialogues*. Ed. Edith Hamilton and Huntington Cairns. Trans. Hugh Tredennick. Princeton, N.J.: Princeton UP, 1961. Print.
- Scarry, Elaine. The Body in Pain. Cambridge, MA: Harvard UP, 1986). Print.
- Sheets-Johnstone, Maxine. "Embodied Minds or Mindful Bodies? A Question of Fundamental, Inherently Inter-related Aspects of Animation," *Subjectivity* 4.4 (2011): 451-66. Print.
- Steiner, Uwe. "The True Politician: Walter Benjamin's Concept of the Political." *New German Critique* 83 (2001): 43-88. Print.
- Synnott, Anthony. *The Body Social: Symbolism, Self and Society*. London: Routledge, 1993. Print.
- Whitehead, Alfred North. *Process and Reality: An Essay in Cosmology.* New York: Free Press, 1979. Print.
- Wickler, Wolfgang. "Introduction." *The Sexual Code: The Social Behavior of Animals and Men.* New York: Doubleday, 1972. Print.