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Sellarsian Synopsis: Integrating the Images

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ABSTRACT

Most discussion of Sellars' deployment of the distinct images of "man-in-the-world" in *Philosophy and the Scientific Image of Man* focus entirely on the manifest and the scientific images. But the original image is important as well. In this essay I explore the importance of the original image to the Sellarsian project of naturalizing epistemology, connecting Sellars' insights regarding this image to recent work in cognitive development.

> «To say that man is a rational animal is to say that man is a creature not of habits, but of rules. When God created Adam, he whispered in his ear, "In all contexts of action you will recognize rules, if only the rule to grope for rules to recognize. When you cease to recognize rules, you will walk on four feet»
>
> (Sellars, *Language, Rules and Behavior*, §15)

Introduction

In *Philosophy and the Scientific Image of Man* (1963b), perhaps the best introduction to Sellarsian philosophy available, Sellars distinguishes between three images of man-in-the-world. Most subsequent philosophers, myself included, who have written about the relationship between the images have focused on the two to which Sellars himself gives the greatest emphasis – the

[*] The ideas developed here emerged from long dialogue with Dr Marco Fenici. I thank him for that interchange, from which I learned a great deal.

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manifest and the *scientific* – in the quest either to give one precedence over the other (Churchland, 1986) or to vindicate a binocular vision (Garfield, 1988; deVries, 2005; Rosenberg, 2007). But there is a third image in play as well, one to which Sellars himself gives relatively less attention, and which his successors have ignored almost entirely – the *original* image. This is unfortunate, for the project of naturalizing epistemology on Sellarsian lines, and making sense of the locus of normativity in the natural world, requires attention to all three images. In the present essay I will take Sellars' vision beyond stereoscopy, bringing all three images into play in the quest for an epistemology fully naturalized on Sellarsian lines, consistent with evidence from contemporary developmental and cognitive psychology.

The *manifest* image is the view of the world and of our place in it delivered by sophisticated common sense. It is the view that philosophical speculation attempts to refine. Most importantly, it is the image in which we are present as *persons*, beings who institute and respect norms in our thought, action and social arrangements, in which meaning emerges as a property of language and thought, and in which this normativity and meaning emerges in the context of a natural world that is in general governed by purely descriptive natural laws, and which is in general devoid of semantic content.

The *scientific* image is the world as our best science represents it. It is the world of microphysics, of cosmology, of chemistry and biology. It is a world of natural phenomena governed by natural law. Most importantly, the scientific image is an image devoid of *persons*, devoid of normativity, and devoid of meaning. In this image we have been explained away through the categories of the life and physical sciences in which the categories of normativity and meaning are not to be found. These images are, although from the perspective of the manifest image, *toto genere* different and apparently irreconcilable, from the standpoint of the scientific image, quite continuous. Sellars notes: «[T]his difference in level [of description in the two images] appears as an irreducible discontinuity in the *manifest* image, but as, in a sense requiring careful analysis, a reducible difference in the *scientific* image» (1963a, p. 6). This continuity, and the possibility of joining the images, is essential to the project of making real sense of the possibility of knowledge, sense that takes both its normative and biological dimensions seriously.

While the scientific image differs from the manifest in being *devoid* of persons and the conceptual categories they implicate, the *original* image is the image in which *everything*, or at any rate, everything *salient* is a person. In this

image storms are intentional agents, trees and non-human animals are partners in dialogue, and the universe is animated with meaning and intention. Sellars suggests that this is a primitive image, one principally of historical interest from which humankind (or at least that part involved in modern and post-modern culture) long ago emerged, and of interest only by way of contrast.

> [T]he refinement of the 'original' image into the manifest image, is the gradual 'depersonalization' of objects other than persons. ...
> A primitive man did not *believe* that the tree in front of him was a person, in the sense that he thought of it both as a tree *and* as a person, as I might think of this brick in front of me as a doorstop. If this were so, then when he abandoned the idea that trees were persons, his concept of a tree could remain unchanged, although his beliefs about trees would be changed. The truth is, rather, that *originally,* to be a tree was *a way of being a person,* as to use a close analogy, to be a woman is a way of being a person, or to be a triangle is a way of being a plane figure. (Sellars, 1963a, p. 10)

But as we will see, the original image may be *original* in an *ontogenetic* as well as a sociogenetic sense; the degree to which even in development, even in modernity, we transcend it may be more limited than we suppose; and its importance as a basis for both the manifest and scientific images, and for the life of persons as persons may be more synchronic and more pervasive than Sellars himself realized.

In what follows, I will begin by considering the mutual presupposition of the manifest and scientific images, and the importance of this interdependence for understanding the place of normativity in the natural world and the demands that normativity makes on our understanding of that natural world. I will then consider the sense in which the original image forms not just a mythic-historical backdrop for the two more familiar images, as Sellars' own presentation suggests, but also a psychological, ontogenetic and evolutionary understanding of the empirical conditions of the possibility of distinctively human life. My discussion is not meant to be a reconstruction of what the man Wilfrid Sellars actually argued, but rather a hermeneutic argument for the best way to take up the set of distinctions he introduces in the service of the account of meaning, knowledge and human cognitive life he articulates in his corpus as a whole, an approach to reading this text which Sellars the man would have introduced wholeheartedly. (He was wont to say, commenting on the

advantages of historical perspective in hermeneutic practice, «we understand Plato far better than Plato could have understood himself»).

1. The Interdependence of the Manifest and Scientific Images

Churchland (1986) argues that the scientific image is the final arbiter of reality, in a Spinozistic sense the locus of the ultimate explanation of the approximate truth of the claims made by the manifest image, and in the end, destined to replace the manifest image as a way of understanding the world and the place of humanity in it. On this eliminativist view, the manifest image is just what we do until the scientist comes along, destined for the scrapheap of cultural history, just as the original image – on his view – has been scrapped. Persons, Churchland and other eliminativists argue, are no more real than storm gods; intentional or normative predication of members of *Homo sapiens* or their behavior is no more apposite than similar predication of tides and their behavior.

The motivations for this view are clear, and indeed have *some* basis within Sellars' own thinking. If science is the ultimate measure of the real, and if the description of the world science delivers is at odds with that delivered by sophisticated common sense, we should discard common sense in favor of science. If, for instance, common sense tells us that whales are fish, and science that they are mammals, we discard common sense and go with science. And, after all, science indeed tells us that we are nothing but collections of atoms in the void, insignificant moments in an insignificant, law-governed universe, best understood in the terms of physics, chemistry and biology, none of which has time to talk about persons, let alone moral or semantic value.

I have responded to this view at length (Garfield,1988, 2000) and will not rehearse those arguments in detail here (see also Rosenberg, 2007). But the main points of the reply are easy to outline, and are all suggested explicitly by Sellars, either in *Philosophy and the Scientific Image of Man* or elsewhere. The scientific image cannot dispose of the manifest image because it *presupposes it*. Science aims at knowledge, and knowledge is *justified true belief* (plus or minus a bit of Gettier). Justification is a *norm-governed activity*; belief is a *meaningful, personal* state. Science itself is an intensely norm-governed activity, and its deliverances are theories, which, if they are to explain, must be both *justified* and *meaningful*. It is hence a transcendental condition of the possibility of the activity of science, and hence of the vindication of the

scientific image itself that the manifest image be in place as the context for scientific endeavor. Independent of the categories of the manifest image, science simply wouldn't be *science,* and here would be no *reason* to adopt the scientific image.

This transcendental argument is obviously Kantian in structure. It is a version of the transcendental deduction of the categories – the demonstration that without a rule-deploying subjectivity no knowledge is possible, recapitulated in Sellars' *Language, Rules and Behavior* (1949) and Some *Reflections on Language Games* (1954). And that is no accident, of course: Sellars was nothing if not Kantian. His own conception of the ineliminability of the normative was drawn directly from Kant (see the epigraph to this essay). We might also note that there is a second reason that the scientific image cannot dispose of the manifest. The scientific image contains the resources to *explain* the possibility of the manifest image, of our norm-governed behaviour, and hence of science itself. Explanation in science is a form of ontological *vindication*, not a reason for elimination.

But this is not to give pride of place to the manifest image. For just as the scientific image presupposes the manifest, the manifest image presupposes the scientific image as its extension and completion, and this regulative role that science plays in our very self-conception is one of Sellars' most profound extensions of Kantian ideas – in this case ideas drawn not from the *Transcendental Analytic,* but rather from the *Ideal of Pure Reason.* The manifest image is the locus of our awareness of ourselves as bound by norms, including centrally *epistemic* norms. These epistemic norms come to us sometimes in the form of what Kant would have recognized as *categorical imperatives,* in this case, imperatives to come to know, to understand. But of course in Sellars' hands, the analysis of their imperative force, and hence of their normativity, has a social dimension:

> [T]he essentially social character of conceptual thinking comes clearly to mind when we recognize that there is no thinking apart from common standards of correctness and relevance, which related what *I do* think to what *anyone ought* to think. The contrast between '*I*' and 'anyone' is essential to rational thought. [...] A group isn't a group in the relevant sense unless it consists of a number of individuals each of which thinks of himself as '*I*' in contrast to 'others'. Thus a group exists in the way in which members of the group represent themselves. Conceptual thinking is not by accident that which is *communicated* to others, any

> more than the decision to move a chess piece is buy accident that which finds an expression in a move on a board between two people. (Sellars, 1963a, pp. 16–17)

This social dimension turns out to be essential to the naturalization of epistemology. Sellars himself saw that it had to be; as we will see, contemporary cognitive science vindicates that verdict, though in surprising ways that make the links to Kant explicit.

We encounter ourselves in the manifest images as persons. Persons cannot, as Schopenhauer (1813/2003) pointed out, experience anything without asking "*why?*". We will return below to the psychological dimension of this demand. But nothing we say or could say under that more empirical head can undermine the fact that the demand for explanation, for deeper understanding, is *experienced* in the first instance *as a demand.* To refuse to inquire, to refrain from demanding understanding, is to recuse oneself from the epistemic community or persons. Not only, as Kant put it, does "all our knowledge begin with experience", but all experience is but the beginning of knowledge.

The manifest image hence contains – in virtue of our representation of ourselves as persons, in virtue of the necessity of persons to constitute and to conform to norms, and in virtue of the fact that those norms include not only moral and linguistic, but epistemic norms – the seeds of systematic inquiry whose flowering is the institution and practice of science, the fruit of which is the scientific image.

> Thus the conceptual framework of persons is the framework in which we think of one another as sharing the community intentions which provide the ambience of principles and standards (above all, those which make meaningful discourse and rationality itself possible) within which we live our individual lives .... Thus the conceptual framework of persons is not something that needs to be *reconciled with* the scientific image, but something to be *joined* to it. (Sellars, 1963b, p. 40)

Without the *telos* of scientific understanding, the manifest image is incomplete. These two images are hence not only *mutually consistent* – as many have argued – and not only *complementary* in developing a binocular, and hence more complete vision of the world and of humanity within that world – as many have also argued – but are also mutually *entailing*, and each

presupposes the other as its transcendental condition. Sellars hints at this point:

> But if in Spinoza's account, the scientific image, as he interprets it, dominates the stereoscopic view (the manifest image appearing as a tracery of explainable error), the very fact that I use the analogy of stereoscopic vision implies that as I see it the manifest image is not overwhelmed in the synthesis. (Sellars1963b, pp. 8–9)

2. The Original Image

But what of the third image – the original image? The original image, as we have seen, is introduced by Sellars as a kind of historical myth of origin of human civilization. Seen this way, the original image is something we have collectively outgrown in a trajectory leading from shamanism to science. It is easy then, to pass over the original image in reading *Philosophy and the Scientific Image of Man*, and easy to refrain from asking why Sellars introduces it in the first place, given the focus of the essay on the tension between the manifest and scientific images. But the original image repays close attention and careful reflection, and indicates a tension in Sellars' own thought that we may be in a position to resolve productively in the service of his greater intellectual vision.

Sellars characterizes the human intellectual progress represented by the transition from original to the manifest to the scientific image as the progressive "depersonalization" of nature: first everything is a person; then we alone are persons; in the end nothing is a person.

> ... [T]he manifest image is the modification of an image in which *all* the objects are capable of *the full range* of personal activity, the modification consisting of a gradual pruning of the implications of saying with respect to what *we* would call an inanimate object, that it *did* something. Thus, in the original image to say of the wind that it blew down one's house would imply that the wind *either* decided to so with an end in view, and might, perhaps, have been persuaded not to do it, *or* that it acted thoughtlessly (either from habit or impulse ....
>
> In the early stages of the development of the manifest image, the wind was no longer conceived as acting deliberately [...] Nature became the locus of 'truncated persons' [...] Inanimate things no longer 'did' things

in the sense in which persons do them. (Sellars, 1963a, pp. 12–13)

That narrative makes a certain kind of sense. But it invites a prior question. And the most obvious answer to that question raises a further question regarding the cogency of the Sellarsian framework itself. Why, in the first place, do those who take up with the world through the original image personalize the entire world? What is the motivation? And whence do the categories of intentionality and normativity that must be in play in treating *anything*, let alone virtually *everything* as a person, come?

We can reframe this question if we take an ontogenetic view of the transition between the images. We might think of the original image as that of the very young child who sees not only persons, but also inanimate objects such as dolls or other toys, as well as animals, as persons, attributing to them intentionality, mental states and processes, and even moral properties. Maturation into a reflective person leads us to restrict these categories to our conspecifics, and indeed only our mature, reasonably healthy conspecifics; overgeneralization to the severely disabled, the impaired, the infantile or the senescent, let alone to non-human animals or machines, is seen as a kind of immaturity. When we become reflective adults, we turn to science as the measure of reality, allowing it a kind of ontological and epistemological primacy in certain domains; though, as I argue above, we never allow it to displace the manifest image in the way that we do expect the manifest image to displace the original developmentally.

But now we can raise the question posed a moment ago in a new register. If the ontogenetically original image is one of excessive personalization, and the restriction of personalization to other reasonably intact *Homo sapiens* is a later development, whence come these over-applied normative and intentional categories? And here we come upon a dilemma, one with an obvious analogue in the sociogenetic register employed in *Philosophy and the Scientific Image of Man*. They are either innate or of social origin. If the former, we seem to give up on the Sellarsian picture of the categories of intentionality as emerging from collectively constituted norms, and of the theoretical model of the introduction of the concepts of inner episodes made famous in the "Myth of Jones". If the latter, it seems impossible to understand how the original image antedates in development the manifest. With an eye on this conundrum, we will turn to recent results in developmental and cognitive psychology to better understand the role of the original image.

3. Empirical Psychology and the Philosophy of Mind

Sellars himself notes the *prima facie* difficulty faced by any account of the emergence of conceptual thought, and hence of the emergence of the capacity to attribute intentionality:

> The conclusion is difficult to avoid that the transition from pre-conceptual patterns of behaviour to conceptual thinking was a holistic one, a jump to a level of awareness which is irreducibly new, a jump which was the coming into being of man. (Sellars, 1963a, p. 6)

Here Sellars is focusing on the constitution of the manifest image, where, he says, «man first encounter himself as man». But we should note that on his own view, this "transition" must occur much earlier if the original image is indeed to be an image in which the categories of personhood are at work. This only sharpens the problem. Things get more problematic, though, when we focus on the crucial difference between the manifest and scientific images themselves, in the context of the account of the theoretical introduction of the concepts of inner episodes such as thoughts and impressions presented in *Empiricism and the Philosophy of Mind*. In that discussion – surely the most influential and oft-cited fragment of the vast Sellarsian corpus – Sellars urges that we think of these concepts as introduced as theoretical entities – as unobserved *explanans* of intelligent behaviour. But the categories of thoughts and impressions are surely part and parcel of our image of ourselves as persons, and so of the manifest image. However, even if they attain a "reporting role", if the myth is to have any force, the semantic properties of overt states are conceptually prior to those of inner episodes, and this appears to be inconsistent with the preclusion of theoretical entities from that image:

> [T]he conceptual framework which I am here calling the manifest image is, an appropriate sense, itself a scientific image. It is not only disciplined and critical; it also makes use of those aspects of scientific method which might be lumped together under the heading 'correlational induction'. There is, however, one type of scientific reasoning which it, by stipulation, does *not* include, namely that which involves the postulation of imperceptible entities, and principles pertaining to them, to explain the behaviour of perceptible things. (Sellars, 1963a, p. 7)

So, if we take the Myth of Jones seriously – and surely that is central to the Sellarsian framework – how are we to make sense of the manifest or of the original images as images whose primary conceptual framework is that of *persons,* but as devoid of theoretical entities? This set of problems must be solved if we are to make any real progress in the project of naturalizing epistemology in the Sellarsian framework. For that involves telling a story within the scientific image of how normativity and the categories of intentionality that define the epistemic domain emerge within the original and manifest images. To solve these problems, it is appropriate to turn to the science of psychology, and in particular to the literature on the acquisition of "Theory of Mind" (the capacity to attribute cognitive states to others and to predict and explain their behaviour on the basis of these attributions) and on the propensity to attribute intentional states to objects in the environment.

The literature on the development of Theory of Mind is vast, and it is well beyond the scope of this paper to survey it.[1] For present purposes, we can distinguish three principal phases in this literature. Initially (the 1980's and 1990's) a consensus developed grounded in an impressive array of studies (the classics are Wimmer and Perner, 1983 and Perner, Leekam and Wimmer, 1987, but there are hundreds of kindred results) that prior to the fourth year, young children were unable to make use of belief-attribution in predicting and explaining behavior, in virtue of their regular failure in such false belief tasks as the unseen displacement and misleading container task and their ilk.

Many psychologists early on attributed this to the maturation of a Theory of Mind module responsible for attributing inner states and reasoning about them. The regular developmental track for this range of abilities, its stability across cultures, and the fact that there seems to be in the autism spectrum a selective impairment of this capacity lent credibility to the hypothesis that an innately determined cognitive module is at work (Baron-Cohen, 1995; Baron-Cohen, Leslie, and Frith, 1985; Carruthers, 2006; Leslie, 1987; Scholl and Leslie, 1999). Arguments from evolutionary psychology led added support to the modularist hypothesis. After all, if we consider the obvious selective advantage to individuals able to tell what others are thinking, it is clear that there would be selection pressure for a module that would subserve such a function. And indeed we see in our closest biological kin – the other great apes

[1] For an excellent overview discussion and assessment of the history and significance of that literature, see Fenici (2011).

– precursor abilities, such as the ability to monitor attention and an understanding of the relation between perception, motivation and action in simple situations.

In the next decade or so, a second phase of theoretical thought developed, spurred by the work of de Villiers and de Villiers (2000) on the connection between language development and the development of Theory of Mind.[2] A substantial body of literature involving both developmental studies and important comparisons of the performance of language-impaired and non-impaired populations on Theory of Mind tasks established a powerful case for the claim that the ability to attribute and to reason about mental states is strongly dependent upon linguistic development, and specifically upon the mastery of the syntax and semantics of tensed sentential complement clauses (Hale and Tager-Flusberg, 2003; Peterson and Siegal, 2000; Tager-Flusberg and Joseph, 2005; Pyers and Senghas, 2009). While more recent work has cast doubt on the tight link between complement mastery and Theory of Mind, and some researchers have suggested a more general connection between capacities such as *irrealis* linguistic representation (Astington and Baird, 2005; Clark, 1998; Fenici, 2011; Garfield, Peterson, and Perry, 2001; Perner, Sprung, Zauner, and Haider, 2003) or narrative competence (Bruner, 1991; Fenici, 2011; Hutto, 2007, 2008, 2009; Nelson, 2009), suggesting more Vygotskian models of acquisition (Garfield et al., 2001; Fenici, 2011; Fernyhough, 2008; Harris, 2005) the role of language in passing classic Theory of Mind tasks appeared unshakeable.

Over the past few years, however, a third wave of theory has washed over the Theory of Mind literature, inspired by the work of Baillargeon (Onishi and Baillargeon, 2005) and her colleagues as well as by Carpenter, Nagell, and Tomasello (1998). A series of very impressive studies have shown fairly conclusively that pre-linguistic children as young as 12 months old, at least implicitly attribute both true and false beliefs to others, understand the relationship between perception and belief formation, act on those attributions (Caron, 2009; Clements and Perner, 1994; Kuhlmeier and Bloom, 2003; Mitchell and LaCohée, 1991; Warrenken and Tomasello, 2006, 2007) and evince surprise when the behavior of others fails to conform to reasonable belief attributions. (Southgate, Senju, and Csibra, 2007; Surian, Caldi, and Sperber, 2007) This literature substantially undermines the thesis that there is

[2] See also de Villiers (2009) and de Villiers and Pyers (2002).

a deep connection between language and Theory of Mind. These new results also suggest that there is a significant innate component to human attributions of intentionality.[3]

Nonetheless, these results do not refute the claim that fully mature Theory of Mind is strongly language dependent, and this language dependence is important. Children require mastery of *irrealis* linguistic constructions, of which sentential complements in English are one class (though infinitival constructions seem equally potent (Cheung et al., 2004, Perner et al., 2003), in order to explain behavior induced by false belief, to predict behaviour in the context of over-riding reality expectations or emotional valence, and to execute non-spontaneous, deliberative false-belief reasoning, as opposed to the spontaneous reactions evinced by infants in these paradigms.

Before we ask just how all of this is relevant to the task of naturalizing epistemology, reconciling the images and explaining the particular role of the original image in human life, let us consider one more surprising discovery from the cognitive science laboratory. We noted above that on the Sellarsian picture, emergence from the original image involves the depersonalization of the non-human world. Not only infants (Csibra et al., 1999), but even educated adults, when viewing a video display of geometric shapes moving about a screen spontaneously describe their movements and relations to one another in intentional terms ("the triangle is chasing the circles") and attribute emotional states to them ("the circles are afraid") (Heider and Simmel, 1944; Michotte, 1946). Moreover, fMRI scans of subjects viewing these displays demonstrate that the areas in the brain associated with spontaneous intentional attributions to persons are active when viewing these displays. (Castelli, Happé, and Frith, 2000). How far have we emerged from the original image?

4. Naturalizing the Normative; Norming Nature

Results such as those of Castelli et al. (2000) suggest that we think about the original image ontogenetically, and not merely as a stage we go through, but about a primordial mode of taking up with the world. As we mature into a life lived in the manifest image, we learn to override that basic disposition to attribute intentionality to whatever moves autonomously or looks roughly animate, in conscious thought, but it never really leaves us. The original image

[3] See also Brooks and Meltzoff (2002) and Baron-Cohen (1995) regarding infant gaze monitoring.

is original, contemporary cognitive science suggests, because the viewpoint it encodes is biologically determined. We have simply evolved to attribute intentionality. Those who lack this ability are failures in the competition for resources and mates in human societies. The hard task for the normally developing *Homo sapiens* is not to learn *to* interpret, but to learn *not* to; to make the transition from the original to the manifest image.

To attribute intentionality or belief to others spontaneously is necessary, but not sufficient for full social life. Without that propensity built in to us (Dapretto et al., 2005; Meltzoff, 2005, 2007; Meltzoff and Moore, 1977), it is hard to see how we could ever acquire it. But that propensity only scaffolds and enables, and does not *constitute* full personhood, the personhood that emerges in the manifest image and which includes the ability to attribute full personhood to our fellows. To put that point more precisely, without the innate fundamental propensities to attribute intentionality, and to engage spontaneously with one another on the basis of those attributions – propensities that, as we have seen, never leave us – we could not coalesce into societies, into communities of language users and norm-enforcers, as we would never engage with one another as collaborators in this project. The discovery of this spontaneous capacity and propensity is hence part of the explanation of the ontogenesis of communities.

Communities of attributers permit the constitution of norms and rules governing the use of terms, governing behavior, and governing assertion and justification. And language permits the development of narrative, collaboration in joint ventures, theoretical endeavour, and explicit discourse about belief true and false, desire requited and unrequited, action successful and unsuccessful. It permits explanation, understanding, reflection, and knowledge in the full sense. This in turn makes the collective practice of personhood possible. In these communities, constrained by norms and thereby limited from mere habits, the resultant discourse, investigations and articulation enables us to acts as persons in virtue of recognizing ourselves and others as persons – not only as subjects and as objects for one another – but as rational interlocutors both responsible to and responsible for the norms that constitute our collective human life (Fogel, 1993; Lewis et al., 2009). Thus arises the manifest image from the original, perhaps not historically, but ontologically. The original, from the standpoint of the scientific, hence explains the manifest.

And as we noted at the outset, once epistemic norms are in place, science inevitably follows. The ground of its possibility, however, is the constitution of norm-governed epistemic activity by beings biologically like us, in the sense that they are wired for intentional attribution. In this sense as well, even as scientists, we never leave our biological origins behind. We are in the end complex animals, but complex animals capable of reflecting in a way that only emerges from our social matrix, a matrix we are wired to construct, and which permits the transcendence of nature realized in self-understanding that nonetheless can be explained as a natural phenomenon.

To naturalize epistemology is nothing more than to come to understand ourselves well enough as natural objects to be able to explain how organisms like us can come together to constitute social collectives, and then to supplement that understanding with an understanding of how those social collectives can constitute norm-governed practices that enable knowledge. That is the work of psychology and social theory, and we have seen that while that work may not be complete, it is well underway. Naturalizing epistemology in this way allows us to see just why all three images are necessary in order to understand our being-in-the-world.

But this Sellarsian naturalization of epistemology also amounts to a norming of the natural world. For in doing so, we come to see ourselves not only as persons, but also as *animals*, animals that have evolved to occupy a particular ecological niche with a particular innate endowment that suits us to live in a particular – and particularly complex – way with one another. To live in that particular, natural way, is to live a norm-governed life; such a norm-governed life is hence not even, as Aristotle or Hume would have it, *second* nature; for us, it is *first* nature. To fall short of that life would be to fall short of what Marx felicitously called our "species-being".

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