

CHAPTER 4

Semiotic Agency

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Semiotic processes are usually understood to have three key components: a sign stands for an object and gives rise to an interpretant. For example, you point (a sign), to something (an object), and I turn to look (an interpretant). In what follows, we will be interested in the semiotic agents that seem to lie at the center of such processes: those entities that do not just signify (by expressing signs of objects) and interpret (by expressing interpretants of signs), but also get signified and interpreted (and thus constitute an object of their own and others' semiotic processes). See Figure 4.1. That is, such agents not only have the capacity to “point” and “look” (broadly construed), they also have the capacity to be “pointed to” and “looked at” by other such agents (which may even include themselves, at some degree of remove).

For a semiotic agent to be an “agent” requires that it is also a semiotic object (from the standpoint of another such agent). In what follows we will look at several different modes of semiotic agency (and hence several different modes of semiotic objectivity). Rather than seeing semiotic agents as simple effects of, or deep conditions for, semiotic processes (such as a Foucauldian subject or a Cartesian ego), we will see them as reflexively constituted creatures, and hence causally concomitant with such processes. Just as you can't understand such agents without reference to semiotic processes, semiotic processes cannot be understood without reference to such agents.

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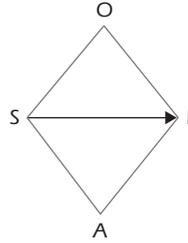


Figure 4.1: Semiotic Processes and Semiotic Agents.

AGENCY THROUGH THE LENS OF SENSATION AND INSTIGATION, SELECTION AND SIGNIFICANCE

Vervet monkeys are semiotic agents. Upon sensing a predator, one such monkey can instigate an alarm call. And upon sensing the call, another such monkey can instigate an escape. Here there are at least two semiotic agents engaged in overlapping semiotic processes. See Figure 4.2. For the first semiotic agent (A1), the object (O1) is the predator (say, an eagle). The sign (S1) is an iconic index of that eagle (say, a characteristic wing shape silhouetted against the sky). And the interpretant (I1) is the alarm call. For the second semiotic agent (A2), the object (O2) is still the eagle, but now at some degree of indexical remove. The sign (S2) is the alarm call. And the interpretant (I2) is the action of running into the underbrush. Instead of one agent simply seeing and running; we have two coupled agents, the first seeing and calling, and the second hearing and running.

Crucially, we may also consider the object (qua predator) to be a relatively derivative agent (A3)—one who is not just seen and pointed to (by the first agent), but also looked at (or “heard”) and run from (by the second agent). Such a predatory agent can, of course, also sense and instigate in its own right. Indeed, its ability to see and swoop is one of the key reasons it constitutes such an important object in the semiotic processes of the vervet monkeys.

There is also a fourth agent (A4) in this scenario—one that is inherently distributed, insofar as it is not just composed of the first two agents, but also partially created by the third agent. In particular, the first two agents arguably constitute a genetic unit of accountability, by reference to processes like inclusive fitness, and thus function as a kind of extended organism.

Moreover, so much of the sensing and instigating behavior of this distributed agent (framed as an organism, qua bottom ellipse) makes sense only in reference to the sensing and instigating behavior of the third agent

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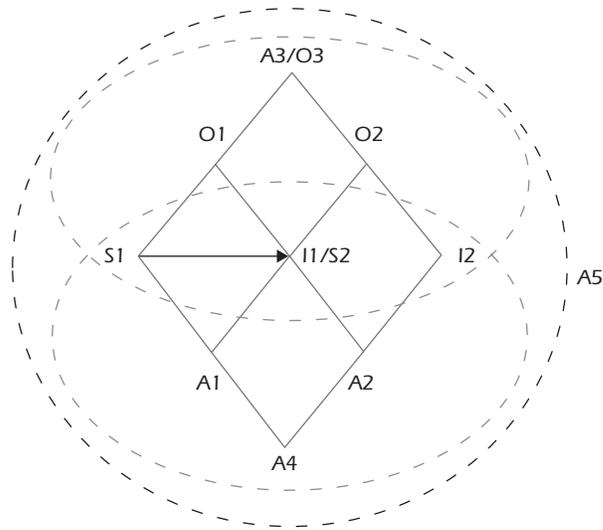


Figure 4.2: Communication Between Conspecifics.

(framed as an environment, qua top ellipse). The capacities and propensities of prey are often best understood in terms of the capacities and propensities of predators. Organism and environment are, indeed, so inseparable when functionally understood that it is tempting to call such a unit an *envorganism*, and to see it as a fifth agent (A5, qua encompassing circle). Such envorganisms, as the locus of those causal processes we must take into account to understand natural selection, might even be considered the originary agents of all evolutionary scenarios (notwithstanding how distributed, emergent, contingent, and confusing they might at first seem).

In short, agency is distributed not only across two cooperative agonists (A1 and A2, together equivalent to A4), but also across such agonists and their antagonist (A3). And it is distributed not only across such interacting agents (framed as waypoints along evolutionary paths), but also across the *longue-durée* processes (A5) that give rise to such agentive precipitates (such as natural selection).

Let us set aside this larger ensemble of agencies, and focus on the capacities of a single semiotic agent, generically understood. What are its key features? First, such an agent is capable of sensing and instigating. In particular, for something to constitute a sign, it must be able to not just stand out in an environment (be a difference) but also be sensible to an organism. And for something to constitute an interpretant, it must be able to not just stand up in an environment (make a difference) but also be instigatable by an organism. And so we can inquire into the range of qualities

and events, practices and processes, relations and interrelations, actions and affects, that an agent can sense or instigate. What kinds of sensory and instigatory capacities does it have? What scales is it sensitive to? How do various kinds of media (from tools to techniques) enable it to extend its capacities or shift its scales? Relatedly, what is the range of semiotic objects such an agent might relate to via its signs and interpretants, its sensations and instigations? Given its current environment, what counts as an object for it? And given its capacities, and the affordances of potential environments, what *could* count as an object for it? Some agents have a wide range of actual, or at least potential, signs, objects, and interpretants; some agents have a relatively small range. What are the conditions for, and consequences of, various ranges?

Second, not only do semiotic agents sense and instigate, and thereby relate to objects via their signs and interpretants, but they are also caught up in selection in a variety of senses. To foreground two extremes, we might say that agents are capable of being selected, and/or capable of selecting, such that their instigations (interpretants) make sense in the context of their sensations (signs), given the features of their objects and their interests as agents. As we saw in the example of vervet monkeys, agents might have been naturally selected to produce certain interpretants (such as calling and fleeing) in the context of certain signs (such as wing shapes and calls), given the objects those signs and interpretants correlate with (such as predators), and given their own interests as agents (say, to survive and reproduce under conditions of predation). And, as we saw in the chapter on gnomonic agency, agents might also engage in “choice” in a stereotypic sense: given a range of possible and desirable interpretants (of some sign, correlated with some object, itself critical to the interests of the agent), such an agent can select which one is the most desirable, and thus worthy of instigating (given the agent’s evaluative standard).

To be sure, these examples barely scratch the surface of various modes of selecting and being selected. There are agents capable of undergoing, and undertaking, artificial selection. There are agents capable of making and using tools, and being made into or used as tools. There are agents that can write, and run, algorithms. And so on, and so forth. As always, we can argue about whether such agents are more or less “originary” or “derived” (and, indeed, whether they should be called “agents” at all). And we can inquire into the relative “openness” of their processes of selection. This is not so much the question of what range of signs and interpretants they can sense and instigate, but rather the relative flexibility, or contextual sensitivity, of their interpretant-sign relations. What kinds of “learning”

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or “programming” or “enculturation” or “evolution” are they capable of, or amenable to? What complex adaptations can they (hope to) achieve? What feats of strength and imagination, calculation and communication, sympathy and sociality, caring and killing, are they capable of? To what degree are they capable of distributing, and thereby concatenating and concentrating, their individual agencies? To what degree can they select options that will increase the range of their possible selections?

AGENCY THROUGH THE LENS OF ONTOLOGIES IN TRANSFORMATION

So much for semiotic agents understood through the intersection of sensing and instigating, on the one hand, and significance and selection, on the other. Now let us turn to a relatively overlapping topic, agency through the lens of ontologies in transformation. Table 4.1 characterizes agents in relation to indices, individuals, kinds, and ontologies. The key issue here is the way that ontologies contribute to interpretations. Table 4.2 characterizes several ways that the ontologies of agents might transform over time. The key issue here is the way that interpretations contribute to ontologies.

Suppose, for example, that you are the individual and I am the agent. I watch you engage in some kind of performance, or trial of strength (an index), and infer that you have some kind of competence, or power (a kind). The performance might be a piano recital, a dissertation defense, a conversation in German, a chemical assay, a race, whatever. I could therefore expect other performances from you, as complex indices, that would be keeping with that kind—for example, success at another trials of strength of a similar nature (e.g., if you played that sonata, I bet you can also play this sonata).

Table 4.1 ONTOLOGIES IN TRANSFORMATION

| | |
|-------------------|---|
| Index | Any quality that is relatively perceivable (to some agent). |
| Kind | Any projected propensity to exhibit particular indices. |
| Agent | Any entity that can perceive such an index and project such a kind (itself often an individual). |
| Individual | Any entity that can evince indices (to an agent) and thereby be a site to project kindedness (by that agent). |
| Ontology | The assumptions an agent has as to the indices, kinds, and individuals that constitute a particular world. |

Table 4.2 TRANSFORMATIONS IN ONTOLOGIES

1. Indices (and signs more generally) may change an individual's kind irrespective of an agent's ontological assumptions.
2. Indices may change an agent's ontological assumptions regarding the kinds that constitute a particular individual.
3. Indices may change an agent's ontological assumptions regarding the indices that constitute a particular kind.
4. Indices may change an agent's ontological assumptions regarding the indices, individuals, kinds, and agents that constitute a particular world.
5. Changes in an agent's ontological assumptions about a world (in foregoing ways) may change the world about which the agent makes assumptions.

This would be a simple case of transformativity number 2: having seen a connection between an index and an individual, an agent connects an individual to a kind (given a set of ontological assumptions in regard to the behavior of various kinds). Other kinds of transformativity are also possible. For example, in the case of transformativity number 3, the agent might hold fast to its assumption that the individual is of a certain kind and, upon perceiving it behave a certain way, update its understanding of the underlying propensities of such kinds (e.g., I guess babysitters don't always behave as I thought). Inductive reasoning is of this type. In the case of transformativity number 4, the agent might hypothesize a new kind (as a way to make sense of anomalous behavior), or start tracking indices it had never noticed before (perhaps because of the advent of a new medium, such as a microscope), or attend to a novel individual (whose behavioral patterns seem newly relevant and potentially predictable). Or, in the case of transformativity number 5, the individual (itself an agent in another frame) might internalize the assumptions of the perceiving agent and change its behavior accordingly—say, a patient trying, however unconsciously, to fit (or thwart) a doctor's diagnosis. (Indeed, an illness, or diagnostic category, is a quintessential kind.) Lastly, there is transformativity number 1, the fact that individuals are caught up in multiple causal processes that help create them and their kindness, more or less irrespective of the ontological assumptions of particular agents: chemical reactions (creating kinds like “acid” and “base”), evolutionary processes (creating kinds like “dog” and “raccoon”), socialization processes (creating kinds like “punk” and “mod”), and so forth.

From the standpoint of such an analytic framework, an agent has many basic capacities. It can perceive indices and project kinds. It can hold (or at least exhibit) ontological assumptions (which enable it to project as a function of what it perceives). And these assumptions can themselves transform

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over time. For example, such agents can be more or less sensitive to the fact that their assumptions are in error and thereby come to update them.

For any such agent, we can thereby inquire into the range of indices it can perceive, the richness of the kinds it can entertain, the diversity of the individuals onto which it can project such kinds, and the number of different worlds it can imagine. Concomitantly, we may inquire into the complexity of the inferences such an agent can engage in, the ease with which it may update its ontological assumptions, the degree to which it can detect and correct errors in its assumptions, and the extent to which its assumptions can change the world. And we can inquire into its access to forms of media that extend such capacities (or buffer itself from the effects or limits on such capacities).

Crucially, such an agent can itself be an individual that exhibits indices that are perceivable to other agents (including itself); and these other agents can project kinds onto it, and thereby come to interact with it in particular ways. That is, such an agent is not just a source of perception and projection; it is also a site of perception and projection. And just as its own ontological assumptions about the world can transform (through its indexical encounters with various individuals), the ontological assumptions that other individuals have about it can transform (via their indexical encounters with it). And, indeed, as per transformativity number 5, such an agent might even be able to internalize the ontological assumptions that other agents have about it, and thereby come to behave according to their beliefs about its various kinds. Note, then, how radically “distributed” such agents can be.

Finally, this whole framework easily scales to a meta-level, for we have just described a particularly important kind in our own ontology—the agent. And we can project such a kind (or power) onto various individuals as a function of the indices they express (as the evincing and exercising of that power). Such agents are a particular kind of kind: one that can perceive and project in ways that conform to ontologies and transform ontologies. In short, and to return to our opening concerns, such agents not only ontologize entities in the world, but they are also ontologized as entities in the world.

AGENCY THROUGH THE LENS OF RESIDENCE IN, AND REPRESENTATIONS OF, THE WORLD

We might characterize comportment as any behavior that involves heeding affordances, wielding instruments, undertaking actions, performing roles,

or fulfilling identities. And we might characterize one kind of agent as any entity (process, event, actor, assemblage, etc.) that enables and constrains one's comportment insofar as it makes a difference in regard to: (1) what one does and how one does it; (2) where and when one engages in such a doing; and (3) why one does it, and what effects arise because one does it. From one perspective, an agent is whatever alters the contents (what and how), contexts (where and when), and consequences (why and to what effect) of one's comportment—even if only retroactively. From another perspective, an agent is whatever has some measure of control (where and when), composition (what and how), and commitment (why and to what effect) in regard to its own comportment. See Table 4.3. And just as the latter kind of agent need not be an “individual,” the former kind of agent includes imaginaries and institutions as much as interactions and infrastructure. In this framing, agents are not just whatever “has” some degree of control, composition and commitment (semiotically speaking), but also whatever enables and constrains the contents, contexts, and consequences of such “havelings.”

Such would be a way of understanding agency as a mode of residence in the world. We would also do well to understand agency as a mode of representing the world (itself always already built on ways of residing in the world). Such agencies enable and constrain the contents of our propositions: not just what we are talking or thinking about (as topics, or referents), but also what we are saying or thinking about such topics (as foci, or predicates). And such agencies enable and constrain our reasoning with such propositions: not just the forms of evidence and inference that lead to such propositions (as roots), but also the forms of evidence and inference that flow from such propositions (as fruits). From one perspective, a representational agent is whatever has some capacity to topicalize, characterize, and reason. From another perspective, a representational agent is whatever enables and constrains the contents of our propositions, the conclusions we draw from them, or the conclusions that drew us to them. See Table 4.4. And again, just as the former kind of agent need not be an “individual,” the latter kind of agent includes imaginaries and institutions as much as interactions and infrastructure. In short, both residential and representational

Table 4.3 RESIDENTIAL AGENCY

Control the contexts (where and when) of one's behavior
 Compose the contents (what and how) of one's behavior
 Anticipate the consequences (why and to what effect) of one's
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Table 4.4 REPRESENTATIONAL AGENCY

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|--|
| Determine Topics (of Representations) |
| Determine Foci (that Apply to such Topics) |
| Determine Arguments (that Lead to, or Follow from, such Topic-Focus Relations) |

modes of agency are inherently multidimensional, graded, embedded, and distributed phenomena.

AGENCY THROUGH THE LENS OF CAUSAL PROCESSES

As should be clear from both the foregoing perspectives, agents stand at the center of causal processes—as targets as much as sources. Such causal processes can, for present purposes, be understood in relatively simple and stereotypic terms: one event (E1) leads to another event (E2) in the context of a field of forces. See Figure 4.3a. How such force fields condition such event sequencing is not of concern here (and, indeed, would take most of human knowledge to explicate fully). Rather, I am interested in drawing out the repercussions of such processes for our understanding of semiotic agents (insofar as such agents “understand” such processes).

Suppose, for example, that an agent is more or less aware of the causal relation between two such events;¹ and suppose that an agent is more or less able to sense and/or instigate such events. In regard to instrumental agency, such an agent might instigate E1 as a means to bring about E2 as an end. In regard to inferential agency, such an agent might predict E2 (having sensed E1), or retrodict E1 (having sensed E2). In other words, to such an agent, E1 and E2 relate not just as cause and effect, but also—at least potentially—as means to ends, sign of object, and object of sign. Instrumental and inferential practices don’t just constitute causal processes in their own right, they also depend on them to function and, in particular, to *malfunction*.

Such causal processes (and hence such instrumental and inferential practices, and hence the semiotic agencies themselves), are subject to various reframings. First, any particular event is caught up in a myriad of force fields, and so is (partially) causal of many other events, and (partially) caused by many other events. See Figure 4.3b. Moreover, any causal process may be reframed as one link in a longer causal process; or as a longer causal process that is made up of many links, each of which is a smaller

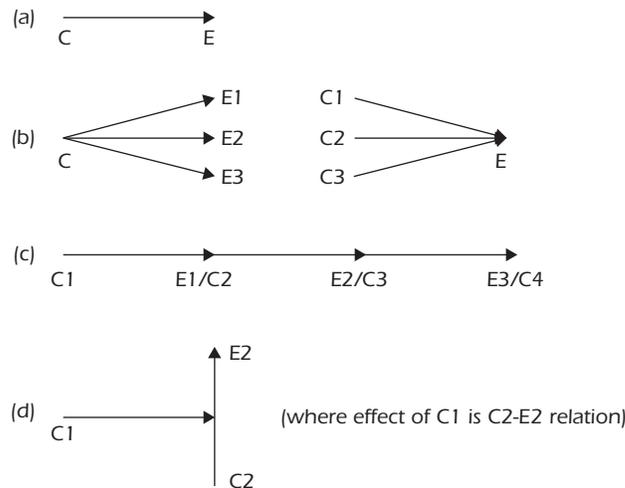


Figure 4.3: Embedding and Enchaining of Causal Processes.

causal process. See Figure 4.3c. Which specific events, force fields, and scales an agent attends to are, in part, a function of what events it can sense and instigate, and what force fields it is aware of. And they are, in part, a function of what it is currently engaged in—either instrumentally or inferentially.

Second, just as semiotic processes can incorporate causal processes (i.e., a sign-object relation, in Figure 4.1, can be a cause-effect relation), causal processes can incorporate semiotic processes (i.e., a sign-interpretant relation, in Figure 4.1, can be a cause-effect relation). As an example of the first case, I can infer fire from smoke (and thereby use a causal process to engage in a semiotic practice). As an example of the second case, I can raise my hand in order to get you to answer my question (and thereby use a semiotic process to engage in a causal practice). Indeed, the key objects of many semiotic processes are precisely causal processes: many semiotic agents can signify and interpret such processes; and thereby communicate, collaborate, and compete in regard to such processes; and thereby help or hinder others in their ability to direct or discover such processes.

Finally, a particularly important kind of effect (E2) is the setting up, removing, or rechanneling of a force field that links two other events (E3 and E4). See Figure 4.3d. In particular, an agent that instigates E1 in order to cause E2 may thereby ultimately govern the instrumental and inferential processes of other agents (who are caught up in E3 and E4). Causing

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causality is closely linked to conducting conduct, and hence a key mode of power or governance.

In short, to know about the causal, inferential, and instrumental processes that an agent is attentive to (and/or subject to), is to know much of what there is to know about that agent. Agents not only discover and direct such processes, but their own processes can be discovered and directed.

With such points in mind, we can now ask a series of questions about particular semiotic agents. What is the range of causal processes they can sense and instigate (and hence direct and discover)? How do such causal processes allow such agents to have agency over larger or smaller swatches of space-time (insofar as E1 and E2 are spatiotemporally “near” or “far” from each other). In other words, to what degree can such agents both act at a distance and with precision? Which such causal processes are relatively portable, insofar as the relevant force fields can be expected to hold wherever (and whenever) such agents go? To what degree can agents make them more portable—by creating an infrastructure, or built environment, in which such force field can be made relatively reliably present? To what degree can agents make causal chains relatively reflexive insofar as the effects they induce act back on them as causes? To what degree can agents discover, and perhaps come to direct, the causal processes that created them as effects (for example, converting natural selection into artificial selection)? In short, or perhaps more generally, to what degree are semiotic agents, through their causal processes, and hence in regard to their instrumental and inferential practices, relatively flexible—in the sense of self-reflective, framing, governing, displaceable, precise, portable, self-reflexive, and so forth?

SPHERES OF INFLUENCE

We may often usefully distinguish between an agent’s relatively immediate and relatively mediate spheres of causal (inferential and instrumental) influence. The immediate sphere (or network, or infrastructure, or context) consists of the range of events they can (more or less) directly sense or instigate. The mediate sphere consists of the range of events they can sense or instigate only indirectly, by tapping into various force fields, and the causal processes these condition and enable. In other words, the mediate sphere consists of all the events an agent can instigate or sense only by way of the causal processes it is caught up in, and attentive to; and hence what

they can instrumentally instigate, or inferentially know, at one (or more) degrees of causal remove.

Crucially, the distinction between immediate and mediate spheres, like the notion of causality more generally, is relatively frame-dependent, requiring that we delimit where the agent ends and the environment begins, or where the agent's relatively inalienable media ends (e.g., its eyes and hands) and its relatively alienable media begins (i.e., its telescopes and rocket launchers). In this way, it consists of a flexible and contestable boundary, which may shift whenever new media, new environments, new forms of knowledge, new techniques, new technologies, and so forth come into play. Indeed, to tie together two earlier topics, it may even (and perhaps more often) shift as a function of new ontological assumptions as to where an organism ends and its environment begins, or which capacities are essential to an organism versus ancillary, or which force fields in an environment are crucial versus contingent.

A key limit on the agent is thereby delimited: where its effects (qua instigations) would end without one or more channels versus where its effects can end given such force fields (which take those instigations as causes, and help generate further effects). In some sense, agency is radically distributed for the simple reason that without all those force fields, or channels, an agent is relatively provincial. Its sphere (or rather network) of influence, and hence the agent itself, is only as small, or as large, as the causal processes they can direct and discover.

ACCOUNTABILITY

Those events that an agent can sense and instigate, instrumentally direct or inferentially discover, via the causal processes it is caught up in, do not—by themselves—delimit the agent, or even its sphere of influence. This is because a significant chunk of agency rests in accountability: of all the effects an agent can have in the world, given all the causes it is caught up in, only some are directly attributed to it (by other agencies), such that it can be held accountable for them. We are punished or rewarded only *for* particular events and *through* particular events, even if we are causally (inferentially, instrumentally) entangled in a much wider range of processes. And so such particularly consequential events loom large *in* and *for* our ontology. That is, such events (for which we are accountable) are not just key objects in our ontologies (as part of their contents, so to speak); they are also a key condition of possibility for our ontologies (whatever their particular contents).

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A wide range of agents can internalize such consequentiality. That is, they can take into account the way their inferences and instigations have effects back on them, for better or worse, through the regimenting agents that hold them accountable; and they can thereby act (infer and/or instigate) in ways that channel such consequentiality: stopping it, redirecting it, modulating it, minimizing it (and sometimes even fostering it). This ability of an organism to internalize the consequences of its own actions, by means of such regimenting agencies, is one key part of our understanding of self-consciousness. But that said, such agencies need not be intentional: we can internalize the sharpness of knives and the swiftness of predators as much as the gaze of states and the attitudes of parents. Indeed, not only our learned behavior, on developmental timescales, turns on internalization as such; most of our innate behavior also turns on the internalization of the reliable causal pathways that constitute our environments on evolutionary timescales. Every organism's body/mind/habitus/imaginary is a diagram of the (salient, reliable, pervasive, shocking) force fields of its environment. (That said, what we have internalized (from past environments) may be out of skew with the current environment—so we are not necessarily well fitted to where we find ourselves.)

With this understanding of causality and semiosis in hand, we may now highlight various senses of accountability. Semiotic agents not only count on (or take into account) causal processes, but they also make them count, both inferentially and instrumentally. Some can, to some degree, offer accounts of such causal processes: they can point to them, predicate properties of them, and reason about them. Some can, to some degree, control the when and where of causal unfoldings (qua E1), the what and how (qua field of forces), and the why and to what effect (qua E2). Reciprocally, semiotic agents are themselves the source and target of semiotic processes, so other semiotic agents can count on, and offer accounts of, them. Finally, as a function of all of this, and as just laid out, agents can be held accountable for the causal processes they are caught up in (by other agents)—an accounting that, to some degree, constitutes the agent.

NOTE

1. Not necessarily aware in the sense of “conscious of,” but rather in the sense of “has ontological assumptions regarding.” For more on each of these accounts of agency, see Kockelman (2012, 2014a, 2014b, 2015). For more on vervet monkeys, see Cheney and Seyfarth (1990). See Gell (1992) for a different take on spheres of influence.

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