

Earth Aesthetics: Knowledge and Media Ecologies

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We cannot think without abstractions: they cause us to think, they lure our feelings and affects. But our duty is to take care of our abstractions, never to bow down in front of what they are doing to us—especially when they demand that we heroically accept the sacrifices they entail, the insuperable dilemmas and contradictions in which they trap us.

—*Isabelle Stengers*¹

The twentieth century made way for an ecological view of mind. Mind was put back in the body, while body became a multiplicity, a teeming ecology of organelles, bacteria, and microbes. Joining mind and body meant an unexpected conceit: thinking is an embodied agency organized by neuronal forces, internal biomes, muscular curvatures, and the flux of respiration. At each moment this ecology of mind is shot through with affect—boredom, anxiety, love, sadness, terror, hope. In the ecological view, our minds are our bodies, but our bodies are not themselves; we are an alien ecology of beings encapsulated by flesh and powered by omnivorous metabolisms. Moreover, while mind was put back into body, body was put back into world—a world increasingly populated by technological devices and unpredictable artifacts. At one point the human mind took shape alongside plants, trees, and earthly horizons, but now—for better or worse—minds mutate and twist alongside skyscrapers, iPhones, and server farms.

This is the ecological view of mind, and it means re-thinking the identity of organisms. In an ecological world the organism unfolds into its ecology, but its ecology enfolds back into the organism; the organism is outside itself shaping its world, and its world is inside the organism shaping its body. Crucially, ecology is a breakdown between structure and content. For the human organism, the strange and unpredictable marsh of ecology means sinking deeper and deeper into the depths of a viscous and contagious kingdom of strange attachments, not just to other organisms and technological devices, but to the very agents by which humans think—ideas and concepts. It is my view that ideas and concepts represent the next step in the deepening ecologization of the human being.

¹ Stengers, 2008, p. 50.

While it has become commonplace to see the human being herself as an ecology embedded in a world, far fewer people accept that ideas and concepts have an ecological nature of their own, participant in the drama of organismic development and speciation. Despite its able supporters, we find only sporadic hints of this view. Gregory Bateson (1987) and Edgar Morin (2008) have both suggested theories detailing an “ecology of ideas.” Gilles Deleuze (2007) comes to a similar sentiment writing, “It seems like concepts have their own existence. They are alive, like invisible creatures.” (p. 238). Most recently, Tim Morton (2010) has suggested that thinking is itself an ecological event. An ecology of ideas, of invisible creatures—it sounds like science fiction, and maybe it is, but maybe it’s the kind of science fiction that ends up being true.

This paper forages into the strangely ecological nature of ideas and concepts. Why? The ecology of ideas and concepts has important implications for how one understands the emergence of human subjectivity, and how human subjects feel and perceive the worlds around them. As Deleuze (2007) goes on to say, “*Concepts* are inseparable from *affects*, i.e., from the powerful effects they exert on our life, and *percepts*, i.e. the new ways of seeing or perceiving they provoke in us” (p. 238). In other words, concepts are both formative and responsive to human feeling (affects), and involve themselves in the kinds of objects foregrounded in our sensory field (percepts). Concepts and ideas are participant in how we feel, behave, and perceive, and this alone makes investigating their nature worthwhile.

4EA

In the cognitive sciences the ecological view of mind comes forth most strongly in the 4EA school (Protevi, 2009).² Like much of the 4EA paradigm, Evan Thompson (2007) sees the structures by which humans experience as embedded in the whole body of an organism—the organism’s body is its mind—and this enminded organism is itself embedded in an ecology of different artifacts and beings, many of which come in and of out presence as we experience a particular event or object. Much of this embodied thinking is affective or precognitive, and thus the majority of what we call “cognition” happens at a nonrepresentational level. There is resonance here with Andy Clarke’s (2008) thesis on the extended mind. Clarke noted all processes involved in cognizing cannot be reduced to the brain alone, “Cognition leaks out into body and world” (p. xxviii). In the extended view habitats of mind include those artifacts—cave paintings, satellites, and alphabets among them—which give a mind recourse to new modes of thought, to new media ecologies of noetic inhabitation.

The enactive approach is often paired with what John Protevi (2009) calls a “developmental context” (p. 24), which situates cognition as an emergent structure coupled to a diversity of ecological and social dynamics. In other words, from the enactive view mental structures provide the conditions for the possibility of certain kinds of experience, but are not given to humans *a priori* as perceiving subjects—they are themselves emergent structures not reducible to genes or biology. In Protevi’s words, “We don’t genetically inherit a subject, but we do inherit the potential to

² 4EA is an acronym for embodied, embedded, enacted, extended, and affective.

develop a subject when it is called forth by cultural practices” (p. 23). Thus what is sometimes called “*The Subject*” is, from the ecological view, re-situated as one possible kind of subject acting amidst a variety of other subjects and subjectivities. When philosophers talk about transcendental structures or transcendental subjects, these are entities enfolded into the larger ecological dynamics of the Earth from which they emerge, and not universally given configurations that reduce subjectivity to one kind of Subject.

The question Bateson (1987) and Deleuze (2007) points us toward is whether or not certain kinds of human subjects are in part made possible by participation with certain concepts and ideas. Can we think of the ecology of ideas and concepts as a set of those agencies which come into presence during certain acts of experience? Further, can we consider an ecology of concepts and ideas as part of the swarming, effulgent mass of creaturely beings that shape human organisms? If the concept is an agent participant in the linking and emergence of different kinds of percepts and affects, then the implication is the deep continuity Thompson (2007) points to between mind and life also extends to minds and ideas. Concepts become ways affective states are evoked in human organisms; they trigger a cascade of new feelings, behaviors, and percepts to awaken in experience. Concepts are affective by means of a vertiginous capacity to upset equilibria—to destabilize the sense of up and down until the compass must be recalibrated and a new north set. Concepts and ideas are not simply things thoughts have; they are themselves constitutive features in the ecology of thinking. But if linking percepts and affects in the emergence of new experiences is one of the things concepts *do*, it still remains open what concepts *are*.

Concepts as Thing-like Technologies

A concept, according to Isabelle Stengers (n.d.), emerges as a response to a problem. Problems are encounters that evoke a multiplicity of options; they implicate, explicate, and periplicate different kinds of solutions (Deleuze, 1994). The problem is a kind of plenum-producing center from which humans affectively compose concepts. In other words there is a relational dimension to concepts; they are the result of an encounter not unlike the way an organism is shaped and shapes the contours of the ecologies in which it lives. Concepts and ideas arise in a call and response with particular problems, and emerge from particular persons in particular places. In the words of Donna Haraway (2008): “‘Ideas’ are themselves technologies for pursuing inquiries. It’s not just that ideas are embedded in practices; they *are* technical practices of situated kinds.” Here Deleuze and Guattari’s (1994) definition of philosophy as the art of forming, inventing, and fabricating concepts is helpful (p. 2). Concepts emerge through human practice as a particular constellation of affect, percept, and problem. Concepts are things philosophers make, and each concept bares the mark of its philosopher, time period, and social situation. In other words concepts are created ecologically at some definite point on the Earth, and at some definite time in its history; there is a geologically situated dimension to the emergence of new concepts, and this becomes an important component in thinking about concepts ecologically.

Deleuze and Guattari (1994) provide us with several examples of influential concepts including “Aristotle’s substance, Descartes’s cogito, Leibniz’s monad,

Kant's condition, Schelling's power, [and] Bergson's duration" (p. 7). Each of these concepts outlived their creators, became part of social history, and are now interpolated by other concepts within larger ecologies of knowledge. As Bateson (1987) noted, "Socrates as a bioenergetic individual is dead. But much of him still lives as a component in the contemporary ecology of ideas" (p. 467). Stated differently, concepts, though finite and immanently composed, have a certain degree of autonomy—they don't die with their philosophers. The concept has a thing-like nature that points to their materiality. As Karen Barad (2007) notes concepts are themselves materially constituted apparatuses. The material autonomy of concepts means we can begin to speak of the possibility of mediated encounters between concepts themselves, and this in turn opens out into an ecological conception of the concept itself.

The thing-like nature of concepts suggests concepts are not simply internal to human culture and psychology, but are, in a weird sense, "out there" and external to all the humans that think with them. Concepts act upon the behaviors and affective constitution of humans recursively. Stated differently, concepts are always ingredient in perception and enfolded into thinking. This means the entities to which knowledges refer are external to the claims that knowledges make, *and* that the knowledges themselves, once composed, are external to the thinkers that think them. In this way the mind is a kind of coral reef attracting and composing affectively charged ideas and concepts—thousands of layers of psychic entities enveloping, fanning, and mutating. The composition of concepts is thus the production of new agents of thought; parasitic and symbiotic they merge to forge new sensibilities. Knowledges are *active* in the constellation of experience because of their thingliness, and this thingliness allows them to collide and reproduce in ways we can consider "ecological."

Concepts as Creaturely Complexes

Concepts are enfolded into a milieu of other concepts, which are themselves enfolded into the geology of a historical epoch. On this view, concepts are an ecological mess; they are middling multiplicities that open out in a seemingly infinite regress. Deleuze (1994) cites Descartes' anxious statement "I think therefore I am" as an example. Each concept contained within this statement opens out into a series of other concepts. Descartes says "I think"—but what is "thinking"? For Descartes "thinking" refers to specific concept of "doubt." And who is the "I am" doing the thinking-doubting? Descartes has in mind a particular concept of "I" tied to a particular conception of the subject—the Cogito, a mental substance. But what is a cogito, and what is a mental substance? Concepts unfold open-endedly, and in this way "I think therefore I am" issues from within a complex of other concepts that need to be excavated. One can perform the same exercise with any starting point: "In the beginning was the Word." But what is a word without letters? Without sentences, grammar, and syntax? The Word is already attached to an ecology of meaning—starting points are really middle points.

Concepts here begin to look like what Lynn Margulis (2008) calls endosymbionts—veritable microbial forests stitched together through the bricolage of evolutionary processes. When we understand that many of the organelles and ecosystems within our own bodies are made up of creatures that are not us we begin

to understand our own identity—the “I” writing this paper—is transfused and infected with an overwhelming amount of “Not-I,” and the same seems true of concepts. When each concept is contemplated it begins to unravel and reveal a scuttling colony of concepts that are not it—there’s a creaturely dimension to concepts and ideas that favors an ecological interpretation. Perhaps “thing” is not the right word after all: Each concept is rather a kind of vibrant body housing its own ecosystem of other concepts. Crablike, each concept claws its way through human thinking burrowing out new fissures in thought. Both labyrinthine and arabesque in nature, we find ourselves crisscrossed by an interlacing foliage of concepts. I call this complex of other concepts the ecology of knowledge, and it leaves us forever in the middle of things.

Concepts and Media Ecologies

While concepts express a certain autonomy from the minds that think them it is not the case concepts can exist in any way but as immersed in different kinds of media. The concept itself may be considered a kind of medium. The mediated exteriority of concepts allows us to understand how knowledges can burst forth from people’s minds and whole bodies, breaking out onto bits of paper, sheet music, canvases, computer screens, or lines of code. Knowledges are *captured*—in texts, minds, computers, words, conversations, sentences, recordings, and paintings, and are *composed* through the whole organism’s practice of being and doing in its world(s). In other words, concepts are autonomous but exist only as part of other complexes of concepts and media. In this way, knowledge ecologies are made possible by different *media ecologies*, but from this view it’s not just human minds that expand out into different media, but that media are themselves populated by a profusion of concepts extending into a variety of their own media ecologies.

Media ecologies have been suggested as important to human beings by a number of theorists. In particular, Marshall and Eric McLuhan (2007) offer perhaps the most influential media theory to fall within the family of concepts grouped under the label “media ecology.” The McLuhans postulated four laws of media that form a co-arising tetrad of effects designed to understand what sensory modalities and affects a medium enhances, obsolesces, retrieves, and reverses (pp. 98-99). A “medium” in the McLuhans’ understanding includes a wide range of artifacts of which software, poems, spacecraft, railways, theories, paintings, and music are all examples. For the McLuhans each of these artifacts is, “in fact a kind of word, a metaphor that translates experience from one form into another” (p. 3). The medium is a metaphor, a shaping context, a message, an ecology.

More recently media theorists have expressed media ecology in broader terms that include the possibility of multispecies media ecologies. Matthew Fuller (2007), for example, generates a form of media ecology inspired by Felix Guattari’s three ecologies of environment, society, and mind (p. 5). Andrew Murphie (2012) offers a media theory inspired by Alfred North Whitehead. Murphie notes: “Whitehead writes of the entire ‘world as medium.’ . . . The medium is the message indeed, but the medium is also the world . . . It is all world(s) as medium” (p. 4). Without using the phrase “media ecology” Graham Harman (2005) suggests a reworking of the concept to include mediums that emerge between the interactions of any two entities, rather than merely between humans and technological artifacts

(p. 91). Finally, in my own work (Robbert, forthcoming) I have suggested a new conception of media ecology where media ecology is defined not as the ways in which human beings transform their own senses, but as the way in which any organism grasps, copes, and transforms an ecosystem. Crucial to this reading of media ecology is the importance of other species within the Earth community. We might call such a project a *geocentric media ecology*.

Geocentric Media Ecology

A geocentric media ecology foregrounds the multispecies entanglements that arise when we consider the vast number of species engaged in composing their own media ecologies on Earth, which is to say a media ecology focused on the ways in which other species are engaged in the active transformation of one another. For geocentric media ecologists notions such as “environment,” “climate,” and “atmosphere” need to be re-thought as kinds of *media* that transform the conditions of reality for an organism, and the sensory enactments of those conditions. From this perspective the sky is not a pre-given backdrop upon which evolutionary dynamics unfold, but an active media ecology composed by a series of enmeshed organisms. Organisms are media ecologists enveloped by the media ecologies of other organisms. The implication here is the Earth itself is not a passive ground upon which events unfold, but a *medium* that constrains and conditions the energetic cascade of organismic and ecosystemic development.

The Earth along with its canyons, mountains, and oceans has a certain *style* (Harman, 2005)—an aesthetic form that actively shapes and encounters other organisms as those other organisms shape the Earth. The evolutionary process in which Earth shapes and is shaped by other organisms is aesthetic in the Whiteheadian sense, which is closer to the original meaning of the word denoting “sensation” or “perception” in general, rather merely a narrow account of beauty.³ The import is that each organism is both itself and the aesthetic form by which it apprehends and is apprehended by other organisms. Geocentric media ecologies thus foreground the important role played by the materiality of aesthetic experience in terms of an organism’s *umwelt*, the phrase coined by Jacob von Uexküll (2010) to describe the terrain of meanings surrounding an organism allowing it to act as a subject. More than this, the aesthetic form provides the means by which the organism materially reconfigures the ecologies in which it participates.

If we think of the Earth as a media ecology, or a series of media ecologies, then we can think of the aesthetic world of each organism from a new perspective. Media ecologies are formalized aesthetic zones that tamper with the sensory ratios and affective sensibilities of organisms, and distribute each organism’s “ecology of mind” beyond its local sensory modes. As anthropologist Alf Hornborg (2001) notes:

³ As Steven Shaviro (2009) notes: “In Whitehead’s metaphysics every actual occasion evaluates the world aesthetically” (p. 152).

Each organism and species exists by virtue of its capacity to perceive and interpret the world around it. An ecosystem is not a machine, where the various components mindlessly fulfill their functions as a reflection of the external mind of the engineer. Ecosystems are incredibly complex articulations of innumerable, sentient subjects, engaging each other through the lenses of their own subjective worlds. (p. 125)

It's a sort of strange but remarkable image: The Earth fluoresces with the cognitive anarchy of billions of organisms and the flashing zones of their diverse ecologies of mind, and this brings us back to the role of concepts in the human ecology of mind.

If we have taken a detour into the aesthetic form of the Earth, this has only been to emphasize that the ecology of concepts and ideas must be thought of as somehow embedded in the medial architecture of the planet itself. While the ecological moment has reframed mind as an agent simultaneously embodied, extended, and affective, we have tried to further this already progressive view by recourse to the role concepts and ideas play in the ecology of knowledge and minds. The concepts and ideas through which we think require not just our understanding, but our transformation. Thinking ecologically means understanding our sense of self is one of the concepts by which we think, rather than the center from which all knowledge is understood. Mapping the ecology of concepts and their affects is difficult work, but I believe developing methods to do so is imperative to the composition of a more habitable Earth. This short essay is an attempt to initiate a new mode of that ongoing investigation.

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