

The Feeling Object

Four Thoughts on Spinoza and the Ecology of Form

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ABSTRACT

When neuroscientist Antonio Damasio claims that we humans have a brain because it allows us to run the economy of our body better, he makes a thoroughly Spinozist argument. In this article several debates in the sciences are read through a Spinozist lens, meaning that Spinoza's philosophy of the body is re-written into these debates. Traversing the modernist dualisms that mark the academic debate up to today, this text shows not only discusses not only the opposition between the mind and the body but also (necessarily) refuses to accept an à priori difference between nature and culture, organic and inorganic, subject and object, entity and environment. Introducing "the feeling body" with the help of Damasio and Spinoza, but also some leading voices in contemporary science studies and cultural theory, the aim is to map briefly what the feeling body can do.

THE INFINITESIMAL

It is a sphere composed of a few hundred stones cemented together, with a large circular hole at the bottom. The top of its dome bears seven or eight sturdy spikes, each a cairn of stones, the larger ones at the base, the smallest at the tip creating a sharp point. The most distinctive architectural detail, the one that gives the name to the species that builds it, is the collar to the circular aperture. It is a pleated coronet constructed from particles too small to be distinguishable from the cement that binds them. The diameter of this whole dwelling, for that is what it is, is about 150 thousandths of a millimeter (i.e. micrometres, written μm). Smaller than the full stop at the end of this sentence, it is the portable home of the *Diffflugia coronata*, a species of amoeba. (Hansell 2007, 58)

The *Diffflugia coronata* is not an animal. It is a single-cell creature that feeds and reproduces, but has no nervous system (thus no brain). Academics interested in animal architecture, like Mike Hansell (quoted above), have difficulty explaining how such a simple organism is capable of creating or "inventing" such a complex form. Hansell's analysis raises a series of questions. A crucial one concerns the necessity of "having a brain" when it comes to realizing material complexity. Hansell (and many others in this field) have long wondered how relatively small-brained animals like weaver birds are able to create complex patterns and how honey bees make perfect hexagons. Every time, behavior and interaction with "outside materials," are considered to be a consequence of a thought, or, caused by the brain, however small this brain might be.

Not only those interested in animal architecture have problems with complex yet brainless cytoplasm. Neurophysiology, of course, also has difficulty accepting this, as an uproar in a 2005 issue *Nature* shows us. I am referring to the discussions (Nilsson et al. 2005) on the Cubozoa, also called the box jellyfish or sea wasp (though these creatures are neither in the family of the jellyfish nor of the wasp). Cubozoos move most elegantly and rapidly, and react with great refinement in their environment (they are fierce hunters). They have an elaborate sensory apparatus most remarkable for the complex eyes that include very sophisticated camera lenses that come very close to our own. In other words: "Making good lenses seems to be a demanding task, because only a few animal phyla have accomplished it" (Nilsson et al. 2005, 202). But having complex eyes is not what struck neuroscientists and biologists in the first place: as with the *Diffflugia Coronata*, it strikes them that these complex senses are not mirrored by a brain. Or at least, that's what, for instance, evolutionary paleobiologist Simon Conway Morris claims: the Cubozoa has a most intricate sensory apparatus but no brain. He adds to this that his definition of the brain excludes four cardiac pacemakers laced into the nerve net organizing its body plan. Referring to a conversation with Nick Strausfeld, Conway-Morris holds the belief that the brain has always been a device to "assess the asymmetries in the sensory surround and to compensate for these by appropriate motor efferent reply" (Conway-Morris 2003, 377), which has of course little to do with what pacemakers do. Nilsson et al. (2005) disagree and instead keep faith in the necessity of the brain, claiming that these pacemakers are in fact brain-like organs. Nilsson holds the idea that there *has* to be a brain responsible for this complex behavior—as a brain would be necessary for interpreting the information these complex eyes produce. Thus they revive the idea that these four very small central or peripheral nervous systems (galgia) should function as the control centre of the animal, according to which it lives. But how does one keep faith in the brain when it comes down to the life of plants and the way they anticipate and sense their environment? Think of the *Chlamydomonas*, flagellate green algae that actively "look for" optimal photo-synthetic growth. *Chlamydomonas* do not have eyes with sophisticated camera lenses but they definitely

make use of eye-like ways of sensing. Of course, they do this without “interpreting” the data received in a brain.

THE FEELING BODY

In a recent online lecture entitled “How Does the Mind Connect with the Body, Neurologically?” neurobiologist Antonio Damasio (implicitly) commented on the issues raised above very elegantly by stating:

We have a brain for a very interesting reason. We have a brain because with a brain we can run the economy of the body in a better way. Throughout evolution you have organisms that are bodies without brains—and they do a pretty good job of running their economy and running their life. (Damasio 2010)

Similar to contemporary thinkers like Shaun Gallagher (see Gallagher 2005), Damasio’s “life” starts with the *actuality of the body* and not with the *necessity of a brain*. This has enormous consequences, especially if we turn his argument around. For by telling us that we humans have a brain that benefits the economy of *our* bodies, Damasio also tells us that other forms of (organic) life might function better without having a brain, without a central nervous system that would control or unify the body. Life is capable of creating a brain and thus it is also capable of not accomplishing those things of which it is capable. Starting from such a principle of contingency, this by no means leads to instability but rather allows us to rethink—in this case, the actuality of the body—from a much more liberal perspective. If we refuse to think nature according to the “Laws of Nature,” which have been thought of by us human beings, and which keep stressing that complex structures, for example, cannot be built (or “thought of”) by brainless cytoplasm, a radically different philosophy of life (also of human life) is bound to occur.

Damasio’s actuality of the body finds its unity by means of feelings, , and fears. These are bodily awareneses that time and again cause the *contraction* which is the body, whether this concerns the human body, the body of the cubozoa, or of the Chlamydomonas. Not surprisingly, Damasio thus refuses the Cartesian dualist thinking that has been so influential in fields like neurobiology and animal architecture, plainly referring to the mind-body problem as a mistake (see, for instance, Damasio 2003). Turning to Descartes’ contemporary Spinoza instead, for whom the mind is nothing but an idea of the body, Damasio allows us to think the body not so much as “that which is unified as one” (because of a central nervous system), but much more as “that which feels as one.”

Damasio’s interests go out to neurobiology, but the link he makes to Spinoza, especially, offers us ways to push this idea of the body as “that which feels as one” much further. Deleuze already told us that Spinoza offered philosophy a new model (Deleuze 1981, 17): the body, and it is from this model (from the body) that Spinoza

allows us to ask key questions of life. Crucial for Spinoza's model, though developed in the mid-17th century, is, on the one hand, its fractal logic, which says that any individual is always an aggregate of individuals *ad infinitum*. On the other hand, the formal element, which Spinoza calls the *conatus*, defines the aggregate as a whole and consequently defines its effectiveness, its power to act. Spinoza himself considered *conatus* the essence of a thing, which is a definition we can only ascribe to if we agree that, for Spinoza, essence was never about fixation or about a search for an a priori definition of a being. Essence, on the contrary—similar to its use in Seneca and Cicero—was the present participle of *esse* ('to be'): *essens*. It conceptualized the being as an attribute of independency, of an actualization of liveness as it makes the thing. In short, essence or *conatus*, is an *ecology of form*; it searches to conceptualize how that which feels comes to be.

A STONE

Coming back to Spinoza's *conatus*, it is vital to understand that it has nothing to do with the necessity of the brain. In a famous letter to G.H. Shaller, dated October 1674, Spinoza explains that the *conatus* is at work *in every possible individual*. Discussing liberty and necessity, he gives us the example of the stone and immediately demystifies the whole idea of consciousness, as it is still so dominant in our days:

[A] stone receives from the impulsion of an external cause, a certain quantity of motion, by virtue of which it continues to move after the impulsion given by the external cause has ceased. The permanence of the stone's motion is constrained, not necessary, because it must be defined by the impulsion of an external cause. What is true of the stone is true of any individual, however complicated its nature, or varied its functions, inasmuch as every individual thing is necessarily determined by some external cause to exist and operate in a fixed and determinate manner.

Further conceive, I beg, that a stone, while continuing in motion, should be capable of thinking and knowing, that it is endeavouring, as far as it can, to continue to move. Such a stone, being conscious merely of its own endeavour and not at all indifferent, would believe itself to be completely free, and would think that it continued in motion solely because of its own wish. This is that human freedom, which all boast that they possess, and which consists solely in the fact, that men are conscious of their own desire, but are ignorant of the causes whereby that desire has been determined. Thus an infant believes that it desires milk freely. (Spinoza 1955, 390)

The *conatus* with Spinoza is thus not to be located *in* the body; it is what immanently *causes* the body (note that Spinoza keeps stressing, very ecologically, that

the chain of causes is infinite [Spinoza 2001, E1P28]), or fractal-ish, as we called it above. It is closely linked to Damasio's "feeling," as it causes a kind of unity or generality to occur. It is the transversal force that actualizes a physical and cognitive assemblage of, not so much in itself, but consequential to what happens. Just as transversal forces cause the Coboza's speed, build the *Diffflugia Coronata's* house, and allow the Chlamydomonas to see where they thrive best.

CLOSING REMARKS

Manuel DeLanda's geological history of the organic world radicalizes Spinoza's ideas on individuality, as discussed above, pushing them from the most infinitesimal to the major breaks in the history of the earth, *including* its most recent so-called Anthropocene era. Rereading paleobiology in line with how Damasio and Conway-Morris did this above, DeLanda radically rethinks the notion of life *as a whole* from an ecological perspective, noting that 500 million years ago, a sudden mineralization intruded the soft tissue or at least cooperated with it. The mineral world thus became an integral part of life. It should not be seen as separate, but rather as an integrate part of its oneness, creating new forms of life previously unknown. For one, DeLanda notes, minerals "made new forms of movement control possible . . . freeing them from the constraints and literally setting them [individual living bodies, for example] into motion to conquer every available niche in the air, in water and on land" (DeLanda 2000, 26–27).

Of course we should read the dwelling of the *Diffflugia coronata* as a similar means for the amoeba to enlarge its power, and to increase its strength, its health, its oneness. This particular life, in the ongoing experiments of inclusion and exclusion, resonated a new form of movement possible in this particular alliance with the mineral world. The *Diffflugia coronata* shows us that life is *not* purely organic, but in fact functions in its permeating of the organic and the inorganic. DeLanda himself deliberately uses the term "nonorganic" in order to confuse the opposition (DeLanda 1992), creating all sorts of zones of intensity through which a oneness comes into being (perhaps even well before DeLanda situates it).

If we claim that the *Diffflugia coronata* and its dwelling should not be thought of as an opposition (organic versus non-organic), a hierarchy (the organic rules the an-organic) and a dualism (the organic necessarily has to think the an-organic in order for the an-organic to be true), there is no reason to define extension in terms of us humans by an organic body separate of that which surrounds it. Human beings are not too different from the *Diffflugia coronata* when about—about eight thousand years ago—"human population began mineralizing again when they developed their urban *exoskeleton*" (DeLanda 2000, 27). The mineralization of the ecological earthly forces can very well be read—with Damasio and Spinoza—as an *improvement* of our body. In other terms, the invention of the urban exoskeleton provided a better economy of movement for our bodies. Urban tissue should then not be considered an outside, separate from the organism, but actually a folding

outside again of the soft tissue and the endoskeleton with which it acts on *the same zone of intensity* (forming one rhythm, one individual, similar to how the tissues and the endoskeleton pursued this before). It is always already an object that feels.

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