

*There is something eternal in a technical scheme... and it is that which is always present, and can be conserved in a thing.*

Gilbert Simondon

### **Simondon and the Theory of Individuation**

Gilbert Simondon's reformulation of information theory on the basis of a new philosophy of technology has, in comparison to earlier attempts, at least the following major advantages to its credit:

- His thought introduces us to an entirely new way of understanding technology. His earliest work investigates the intrinsic nature of the machine. He asks about the conditions of the genesis of machines in the world, the essential nature of their concrescence from an abstract model.
- Maybe more importantly, he gives us a new conceptual model for understanding reality, in terms of the process of individuation, or as he would put it, transduction in a metastable environment. It is a model which has isomorphisms in nearly every branch of science, from physics (turbulence, quantum field theory,) chemistry (crystals, superfusion,) psychology (perception, affection, the unconscious,) mathematics (chaos,) and biology (transduction, individuation.)
- By discussing the orientation of perception and action in terms of metastable relationships (instead of pure relations, concepts, species, etc.) we are able to move beyond the hylemorphic model of perception and reality (which hypostasizes "individuals" from what is really, and before anything else, a process of individuation.)
- In short, Simondon's philosophy attempts to work its way beyond, and underneath, categories like association and representation towards a non-hylemorphic program for science in general.

Simondon outlines no less than the lineaments of a new physics, a new chemistry, a new biology, a new psychology, and perhaps a new philosophy – all now re-organized by an *individuation of our scientific knowledge*.

One of the most interesting aspect of his philosophy is that we are drawn, in Bachelardian fashion, to consider the 'poetic' or *nonverbal knowledge* articulated, for example, by the hands of the craftsman or of the musician. He introduces us philosophically to this harmonious dialogue between self and other which occurs in technical creativity (and perhaps in creating abstract and philosophical machines most especially.) There resound throughout Simondon the praises of technical creativity. Van Lie even considers that Simondon's thought suggests a new kind of humanism — a sort of technological humanism, on the basis of a new model of perception.

I would probably agree: Simondon writes that perception is always the resolution of a conflict. Not to mention that the *historical* replacement of the human hand by the machine, the perception that the machine was superior to men in this or that aspect, in terms of *value* – this comprises no less than the essence of alienation in Marxian theory. Suffice it to say Simondon's political importance today also cannot be understated. In short, we should understand our political systems in terms of individuation, instead of thinking the individuation of political systems in terms of particular systems, whether historical regimes or eternal 'substances' or 'forms'. By in this way comprehending the incompatibility within every system which produces individuation, we approach a middle path beyond Plato and Aristotle, towards a new political ontology, a political onto-geny.

But Simondon's real project is the radical critique of autopoiesis. Simondon takes on the cyberneticists at their very foundation, in the very idea of a system. He reminds us that even though we may unravel the series of temporal sequences and structures in an individual system, there will always be something left over. In particular, there will be what Simondon calls a pre-individual field of singularities — a heterogeneous manifold of potential differences. Without this milieu, this field of tensions, there could not come to exist a system of relations, or a machine, an organism, a body, a crystal, or an individual of any sort. The process of individuation requires a field of singularities, it plays upon these intensities; individuation is the transformation of these tensions into structures, and necessarily produces a new differential milieu in this doubling and unfolding of structures and series. The pre-individual field is called "pregnant" in its intensity with the potential for individuation. Relationships are always relative, never pre-existent. Rather, they emerge transductively through differentiation. An individual is always within the pre-individual field which was the condition for its genesis which precedes it ontologically.

Simondon's realization of the continuity between the technical and the cultural has the power to transform our scientific worldview, because we can recognize there is no opposition between "man" and "machine." What is in question is this very relationship, which is misunderstood because we have for so long misunderstood the nature of the machine.