

ON INFORMATIONAL ENTROPY

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I myself am not satisfied with the expression ‘informational entropy’, for many reasons, but I believe it is workable, and not pleonasmic, because such a thing as informational negentropy does exist. If, for me, the ‘notion of information’ remains unsatisfactory, inasmuch as Simondon uses it without, in my eyes, ever giving it a satisfactory definition – this is so for two reasons:

1. Simondon posits that information can be thought independently of its supports, but this utterly contradicts what he himself says about the transindividual inasmuch as it is, on the contrary, supported by technical artefacts;
2. he never refers to the biological conception of negentropy, and in this way remains caught up in the debates around statistics in information theory, and does not raise as such the question of calculation (a question that he must find too ‘Heideggerian’).

If this is how it is for me (being dissatisfied with this ‘notion’), I nevertheless think that information does contain negentropy, such as, for example, if France Inter informs me in a way that will cause in my behaviour (as input becoming output, as Wiener would say) a transformation, however minimal it may be (for example, it will rain this afternoon, and *therefore* I will take an umbrella).

What I posit in principle, and as a point *of departure* (which is what principle means: *archè*), is the following:

1. Information is entropic in that it loses its negentropic content [*teneur*] as it is disseminated (this is explained in *Technics and Time*, 2), and it is so in fact as in law [*en fait comme en droit*].
2. On the other hand, knowledge is *in principle* [*en droit*] what does not lose its value with its diffusion, and the reverse is even the case: as it is diffused, it is strengthened, because it is transformed (*en droit*). One who knows enriches what he knows by the mere fact of knowing it, because he singularizes what he knows: this is the question of the difference extracted from repetition in Deleuze, and of the noetic *différance* that I try to think and care about [*panser*] with Derrida. That said, in fact, knowledge can function as information, and this generates what Socrates called sophistry, where there is no longer an anamnestic feedback loop (that is, the cycle of images arising from the noetic necromass and thus from Popper's 'third world').
3. This is why knowledge can *in fact* be 'received' only as information. For example, the craftsman who uses a calculation algorithm expressing a theorem, such as that of Pythagoras, utilizes geometric knowledge as information: he does not participate in its differentiation, that is, its practical value, and he has no need for it. There is, however, a very interesting borderline case: what presents itself to him in the mode of receiving information does not lose its value over time. As a result, it uses knowledge, and not just information, and this utilization that does not lose value over time is an apprenticeship, learning, which is nevertheless not knowledge, and amounts to what I call a skill [*compétence*] – because if the good mason obviously has knowledge (of how to do), it is not on this plane of the use of geometry: the practical value it can generate stems from his knowledgeable relationship to his instruments, his materials, to the physical laws that present themselves to him in their empiricity, that is, as his experience, in the mode of what Heidegger calls being-in-the-world, and so on.

By making these points, I am continuing a discussion with Vincent Puig about what Victor Chaix produces on the blog of the Friends of the Thunberg Generation¹: if it were only information, this production would not match our expectations; the goal is indeed to give rise to circuits of transindividuation related to knowledge as a neganthropic and anti-anthropoc sharing and extension that occurs by différent repetition – between the Thunberg generation and the noetic necromass to which we ourselves will belong if we have been able to enrich the relationship to the ‘third world’ [in Popper’s sense].

The blog of the Friends of the Thunberg Generation does, of course, also produce information, for example, days that will be held online, but as time passes this information will become ‘out-of-date’: this is the informational entropy spontaneously generated by the diffusion of information as time passes. There are, however, other forms of obsolescence, linked for example to the withholding of information, to secret information shared between insiders, such as for the purposes of speculation, etc.

In addition, and above all, there is informational entropy of another type, that of the data economy, which consists in extracting and exploiting information by processing it via feedback loops in such a way that they systemically ruin the neganthropic systems acquired by those who produce and retroactively receive information, and do so in the form of digital hypomnesic tertiary retentions, which, on social networks, include what are called ‘posts’.

This is the informational *anthropy* that engenders post-truth, along with mistrust and discredit, all of which makes societies (higher complex exorganisms) very fragile, and causes the collapse of what Sloterdijk believes can and should be described as immunitary systems. I will return to these points by commenting on Sloterdijk and on Yuk Hui’s commentary on him.

Finally, in Simondon, the ‘notion of information’ designates a relationship between states in a process that he calls individuation. It is not information in the sense of

¹ <https://blogs.mediapart.fr/les-amis-de-la-generation-thunberg/blog/300120/une-plateforme-de-savoirs-pour-sortir-de-l-anthropocene>

information theory, and it is much closer to what, in Aristotle, arranges *dunamis*, *Energeia* and *entelekeia*.

I maintain, however, that Simondon, who constitutes this notion in dialogue with Wiener, does not draw all the consequences of his own work, particularly as concerns what links psychic individuation, collective individuation and technical individuation together, and he remains ambiguous about this fact and ultimately about what really distinguishes cybernetics and information, while at the same time ignoring the questions of exosomatization, negentropy and biological anti-entropy (that is, locality as spatial and temporal constraints), never quoting Schrödinger, to the point that one wonders if he has read him. On this point, the questions of flows, zones, and niches raise exactly this question.

Here, I believe Yuk turns to Bateson, and I agree with him that we must go in this direction – but by adopting a pharmacological standpoint that is present in Bateson but not, in my view, in Simondon.

These questions are today crucial, because they alone make it possible to constitute a ‘hyper-critique’ of informational neoliberalism conceptualized and concretized by Friedrich Hayek, Herbert Simon, Milton Friedman and ‘platform capitalism’, as Dan Ross and Mirowski have clearly shown.

Translated by Daniel Ross.