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### Insects

At some point, philosophy started talking about insects. Insects became a recurrent conceptual character. Bergson writes beautiful pages about wasps (1907), Heidegger (1929) about bees, Henri Maldiney (1991) and Gilles Deleuze (1995) about ticks.

Philosophy is a kind of laboratory. The output of that laboratory is concepts. And what is a concept? It is a concentrated experience, something that happens in the world summarized in an extremely economic form. A crystal of events.

So, at some point, the activities of that laboratory change perspective. The main characters are no longer God, Being, Good and Evil, or not only and not always. We should ask what happened, what kind of transformation is going on. Not so much in philosophy, but in our world.

### Instinct and intelligence

Let's consider Bergson. One of his great books is *The creative evolution* (Bergson, 1907). We find here many pages about wasps and their preys: caterpillars. He does not only speak about wasps and caterpillars since the author is a great admirer of Darwin, a philosopher who wants to construct something like a philosophy of biology.

In which context does Bergson introduce this new philosophical character, the wasp? When we answer this question, we begin to understand. The wasp is introduced in a chapter where Bergson reasons about technology, about the instruments we use and the tools every form of life uses. His book is the book of a Darwinian thinker, as said. So, the first thing Bergson carefully avoids is to split the field of his enquiry. Nature and artifice, biology and technology, body and instruments. Bergson holds together the two regions and establishes a perfect continuity among them. Every form of life uses technologies. Not only man. Not only primates, as it would be easy to say. The argument would be again a dualist one. Primates would play the role of a prudent exception. Every form of life uses instruments, says Bergson. Or, more precisely, every form of life is a technology. His chapter provides a sort of natural history of technology. We should, if anything, describe the structure of these different technologies, the peculiarity of their specific functioning. In the second chapter, Bergson proposes two definitions that help us to proceed in this direction. We call intelligence, he says, the capacity to use an instrument from the outside, not as a part of our body, but through a sort of fundamental distance. And we call instinct, he adds, the capacity to use an instrument from the inside, in a sort of fundamental continuity, in a way that includes the instrument within the space of our body, in the field of its functioning.

### Amoeba, and momentary organs

One of Bergson's examples (1907) is the amoeba. The amoeba is a mass of protoplasm, he says. In some sense, it doesn't have organs. But when it encounters food, the membrane which envelops the mass opens in a sort of mouth. That mouth is an organ which lasts the time of its function. Once the food has been swallowed, the mouth becomes an internal bubble, which englobes and digests the bite, a kind of momentary stomach. Then the bubble reaches the surface, the membrane opens again, and even this new organ of expulsion lasts the time of the expulsion, a sort of temporary anus. What is interesting in Bergson's example (Leoni, 2019)? The idea that there are organs that are in such a profound continuity with the organism, that not only can't they be classified as external instruments, like a hammer or a bicycle, but neither as internal organs such as our heart or our lungs. Heart and lungs are stable organs, stably characterised by a certain physiology, stably engaged in a certain function. Amoeba organs, on the contrary, are the organism itself, temporarily declined, temporarily folded on itself, in a sort of doubling or difference which is differentiating but also and always undifferentiated in those differentiations. Moment by moment, every fold unfolds, and recreates itself in another point, responding to another occasion, developing another function. Amoeba organs coincide with the time of their operation, and in a sense they are nothing different from their actual operation.

### Hearts and bicycles

The question of time is always instructive. Let's try to extend Bergson's suggestion. Let's interrogate our instruments in the perspective of his example. All our instruments are stable objects. After their use, they continue to exist, they remain identical to themselves, they are at our disposal for the next time. We could classify instruments on the basis of their duration. Do they last the time of their operation? Do they last longer than their operation? How much longer? Our heart is not a momentary organ, it is a heart from the beginning to the end of our life. My bicycle is an even less momentary organ, it continues being a bicycle all my life and more. It will be a bicycle for my son, and for those who will eventually buy it in some flea market. Also death is always an instructive anthropological indicator. What does this stability of the instrument imply? What happens when this stability increases to the point that the instrument lasts longer than the moment of its operation, or more than the time of the life of the living being it had to assist? What happens when the instrument becomes so stable, so self-identical, so resistant

to every kind of change, that every organism encounters it as something completely external and other? We could answer in one word: Culture is born. Old instruments remain for new subjects, and the new subjects will share with old generations something which is more stable, more binding than them, something which sets the law to which the organism or the subject must respond.

As we can see, time is the great operator of all these differentiations. The different duration establishes the great difference between what we usually call organ, and what we usually call instrument. It is not a difference of nature but of grade. It is not a difference among two fields but the differentiation of the one and only field. The different temporalities determine the variable geometry of the use. The more the instrument lasts, the more the organism appears used by it. The less the instrument lasts, the more we tend to see the instrument as an organ, and the organism as the subject which uses the organ. The Greek knew something about this continuity, and Bergson takes advantage of their wisdom when he plays on the threshold of the Greek word “organon”, which is at the same time the biological and internal instrument and the technological and external organ.

### Wasps, and scale errors

Let’s go back to wasps. Bergson underlines one or two things

which assume great importance in his analysis (Bergson, 1907, chapter 2). The wasp, he says, always knows where to sting the prey, typically the caterpillar. The wasp, he adds, always knows when to sting the caterpillar.

We could say that, within this landscape, there is no space to hesitate, nor to formulate a question. Where should I sting it, when should I sting it? The answer comes immediately. So we must understand the nature of this odd thing, an answer which comes immediately. This is the pure concept implied in the conceptual character of the wasp. There is no time to cross, no space to cross in order to act. In a way, all is already present. But what is an answer if it is not an answer to a question, what is an action, if it doesn’t follow another distinct action? We may say, what is an answer which answers itself?

If we follow these questions, we are forced to an utter disconcerting conclusion. The wasp and the caterpillar are a one and only thing. If anything, we must consider the caterpillar as a momentary organ of the wasp, a temporary extension of its body, or the wasp as a momentary organ of the caterpillar since we know that organs don’t always peacefully cooperate. In other words, the hostility of the two is not an argument against the idea that they are a one and only thing. More exactly, we must consider the wasp and the caterpillar as momentary organs, as temporary

foldings, coordinated because they differentiate out of a larger but unitary organism, which in some ways has no definite time borders and no definite space dimensions.

As long as we keep on describing two separate organisms, we don’t understand what’s happening and how it can happen. How can the wasp never fail? What gives her the knowledge about the right place to sting, the right time to attack? When we study them as a unique organism, many problems fade away. It is no longer a question of knowing or not knowing the right time or place. It is no longer a question of choosing among many times and many places, or which one would be the right one. There is a one and only organism, a one and only time, which must be the right one because there is no other time, no succession of separate instants. A one and only place, which must be the right one because it doesn’t involve an extension of points external to each other. A one and only action, which is not the juxtaposition of two partial actions, stinging and being stung. A one and only event.

Let’s briefly meditate on this thing we call event. It must be an impersonal event, which passes through its various parts and elements and characters. An event which is wasp and caterpillar, a wasp which encounters itself as a caterpillar, or a caterpillar which encounters itself as a wasp. Or a third thing without a name, which encounters itself and which evolves, in each encounter, into two or more different directions that we can call, for example, the wasp and the caterpillar. The scene was described with a scale error (Leoni, 2019). We must not think in terms of single elements, or organisms, or species, but in terms of blocks, couplings, concatenations, coevolution (Thompson, 1994). We have to think in terms of differentiations in progress, not of already differentiated and separated differences (Deleuze, 1967). And we should say that the more each difference pushes its differentiation forward, the more it finds at the bottom of its difference the other differences, the other differentiations, the other apparently extraneous lines. The more the wasp becomes the wasp, the more it becomes the caterpillar and all other beings which are implied in the caterpillar’s life, evolution, differentiation. The more one thing becomes that thing, the more it realizes in its perspective all other things. That’s what we call an impersonal event or process: a generality, but also absolutely singular; an omnidirectional totalisation, centered around an event which is always absolutely unique.

### Chimpanzee and externalized organs

Let’s consider some classic observations about chimpanzees (Kohler, 1925). When they want

to reach a banana that is fixed up too high, they know they can use a stick to reach it. They search for the stick, they hit the ba-

nana, they eat it. And then what do they do? They abandon the stick. a presence for him even when it is still absent from his perceptual field. But the stick has no general presence, it doesn't gain a presence that is really independent from the actual situation. The day after, the primate will search for another stick, it will use it, and will forget it again. From this point of view, the primate hasn't emerged from that dimension of temporary technologies, which has its greatest paradigm in the amoeba. From another point of view, the primate knows so well that those momentary organs are instruments, that he can search for them, he can anticipate their presence in his surroundings, he can imagine those functions externalized and projected in a somewhat objective field of possibilities. The organ is becoming an external instrument, it will become a sediment in the external space. Or, better said, space is becoming for the first time something external. And the subject is becoming something internal and properly subjective.

It is on this line of externalization of internal and temporary organs, that we find *homo sapiens*. At one moment man coopted some less aggressive wolves and integrated them in the human herd (Shipman, 2015). He learned to trust them in various situations, hunting for example. His nose became less and less sensitive, but his hunting became more and more efficient. Should we say that man has lost the sense of smell? No, it is exactly the opposite. He increased it by coopting and integrating in a kind of extended and collective organism those new external organs called dogs (Ruyer, 1952). The history of the coevolution of this human-canine concatenation is the history of the externalization of the human nose, at least when we tell the story from the human point of view. The case of the hammer or the bicycle is not so different. They are externalized hands and legs. The mark of this complete externalization is the trivial fact that when we are done with them, we put them on a shelf or in a garage. We should meditate the extraordinary power of the invention of the shelf (Giedion, 1948), the space of the available instruments, the instrument which maintains, within the frame of an infinite presence, all our absent instruments. The shelf frees our instruments from every temporary character, detaches them once and for all from our body and from its ongoing operations. The shelf is the invention of future, the matrix of the possible, the condition of every human chronology, the transcendental space which gives presence to the absence by making absent from now on any kind of presence.

### **Entomology and information technology**

Yet something new happened since the hammer and the bicycle appeared. What kind of instruments have we built in the last fifty years? Are our technologies more of the "hammer and bicycle" type, or are they

more like the "momentary mouth and stomach" type? Didn't we realize something new, something we are thinking of in terms of technology, but we should understand in terms of organology?

We begin to realize the value of that strange symptomatology of contemporary philosophy. Bergson talking about wasps, Heidegger about bees, Maldiney and Deleuze about ticks, and many others we could cite. Consider information technologies. As we all know, they are everywhere, none of our activities happen without intertwining some form of informatic support. Having a coffee, shopping at the supermarket, working at the office or at home, dating or going to the cinema, every daily gesture is faithfully accompanied by what has been called the celestial providence of the algorithm (Alizart, 2017). Laptop computers and mobile phones are the materialization of this unceasing informatic companionship. All of our operations converge in those little tabernacles, and from those little tabernacles our operations restart towards many devices and operations.

But we must not be fooled by their humble dimensions. The fact we can hold them in the palm of our hand or keep them on the small surface of our desk doesn't mean much. Since they minutely encode every gesture within their grids, since they monitor every action moment by moment, they provide us with a sort of environment. This tireless operativity of the algorithm is the factor that converts an instrument into an environment and commutes this environment from an external and inertial container into an active space within which all events must take place. The subtle rain of questions it addresses towards us is the factor that constitutes all our behaviours as a repertoire of answers minutely and immediately adapted to the questions, so that the questions cannot find within the answers anything but themselves. Algorithms are talking to themselves through us.

The continuous character of this monitoring profoundly recalculates the nature of the actions of those subjects we used to be. Our actions were a set of instruments disposed on the shelf of the possibles. We were subjects because of the distance we had with respect to those objects of our questioning. The time of the hesitation among the possibles was the time of the subjectivation of these actions and the root of the illusion of our freedom (Bergson, 1907). All of this is now recalculated in terms of a process within which the time of the question increasingly coincides with the instantaneous time of the answer, so that the form of the subjective decision increasingly resolves into the form of a continuous and imperceptible autoregulation of the system. We don't decide on an action, but we participate in an impersonal operation. This operativity without a subject performs by itself by recalculating in every instant its motionless movement through our bodies and minds.

This kind of technological regime is an organological regime.

The sphere of the information technology is something of an organism. Users are its momentary organs. Our activities are its offshoots, moment by moment aroused and dismissed, instant by instant shaped out of precedent applications and abandoned to forthcoming applications. We are the momentary mouths, the temporary stomachs of an extensive and translucent informatic amoeba, hence the feelings of solitude and hyperconnection which coexist so typically in our time and anthropological type. But those who suffer from this contradictory affect suffer from the hesitations of every half-breed being. We are going towards the operativity of a wasp's nest, but we are also forged by old instruments that continue to breed old feelings of subjectivity. If we look forward, we see that the mixture will resolve by itself. The subject-form will decline more and more, and the entomological paradigm will absorb ever higher quotes of our experience.

Bergson is the great symptomatologist of this organological mutation of our technologies. He talks about wasps and caterpillars, but he is speaking about us. We could repeat what was said about them. Until we describe certain phenomena by distinguishing two things, for example nature and technology, bodies and instruments, subjects and environments, we don't understand what is happening and how it is possible for it to happen. How can the wasp always know the right place to sting, the right time to attack? When we assume there is a unique organism which folds upon itself, which doubles and differentiates itself in each fold, and which, for this very reason, perfectly coordinates and corresponds with itself in every fiber, a whole series of enigmas fade away. It is no longer a question of knowing or not knowing, or of choosing the right time and place among many times and places. There is a one and only organism. There is a one and only time which must be the right time because it is the only time, a vast present pulsating everywhere. There is a one and only place which must be the right place because it is the only place, a unique space pulsating of many inner spaces. There is, in one word, a one and only event, a one and only complex which is completely natural or completely artificial, the difference between natural and artificial being the effect of a class of instruments which are no longer our prevailing instruments. This third thing is what encounters itself in every instant and in every encounter diverges, sediments in points that keep on becoming into different directions, breeding within their unique bubble wasps and caterpillars, bodies and instruments, inner spaces and outer spaces. Our technologies are organologies and our experience has been minutely described not by our modern psychological disciplines but by our eternal and changeless mystic tradition (Bergson, 1932).

## REFERENCES

- Alizart, M. (2017), *Informatique céleste*, P.U.F., Paris, France.
- Bergson, H. (1959), *L'Évolution créatrice* (1907), Oeuvres, P.U.F., Paris, France.
- Bergson, H. (1959), *Les Deux sources de la morale et de la religion* (1932), in Oeuvres, P.U.F., Paris, France.
- Deleuze, G. (1967), *Différence et répétition*, P.U.F., Paris, France.
- Deleuze, G. and Guattari, F. (1995), *Qu'est-ce que la philosophie?*, Paris Minuit.
- Giedion, S. (1948), *Mechanization Takes Command. A Contribution to Anonymous History*, Oxford University Press, Oxford.
- Heidegger, M. (1983), *Welt - Endlichkeit - Einsamkeit. Die Grundbegriffe der Metaphysik* (1929-1930), Klostermann, Frankfurt a.M.
- Koehler, W. (1925.), *The Mentality of the Apes*, Kegan Paul, London, United Kingdom.
- Leoni, F. (2019), *L'automa. Leibniz, Bergson, Mimesis*, Milan, Italy.
- Maldiney, H. (1991), *De la transpassibilité, in Penser l'homme et la folie*, Millon, Grenoble.
- Ruyer, R. (1952), *Néofinalisme*, Gallimard, Paris, France.
- Shipman, P. (2015), *The Invaders. How Humans and their Dogs drove Neanderthals to Extinction*, Harvard University Press, Harvard.
- Thompson, J.N. (1994), *The Coevolutionary Process*, University of Chicago Press, Chicago.