

# The dynamic polarity of life and the concept of normativity in Georges Canguilhem's philosophy

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*Abstract:* This paper concerns the notion of dynamic polarity of life and how it was rethought by the French philosopher of science, Georges Canguilhem. This notion is connected with the problem of norms and normativity as well as of values and valorization. The author of this paper focuses on certain roots of the notion of dynamic polarity of life, with special reference to Gaston Bachelard's philosophy. The polarity of values is evident in the case of some biological antagonisms: life and death, health and disease, or the normal and the pathological. These antagonisms lead to a description of the precarious nature of values and life. Norms are not conceived as relative, but nor assured (like health and life). Healing is a battle for valorized norms. Canguilhem believes that disease should be understood as something which bears a negative value, even if it leads to crises (or crossroads) from which one might be able to shift to new normal situations. Also death commonly bears a negative value, even if death may also be a rescue for the living being. Diseases as well as healing lead to a new normality of the living being and thus change biological individuality, e.g. a relation between an organism and its environment. In this sense, Canguilhem gives rise to new possibilities of specific axiological studies concerning living beings. Even if axiology is somehow a core theme of Canguilhem's considerations on biological relations, he nevertheless avoids to extend it blithely to the social or moral sphere. Such a peculiar axiology concerns rather the vital than the social organization of life. Nevertheless, according to the French philosopher, human life has not only a biological but also a social and existential sense. And philosophy should embrace all these possible senses.

*Keywords:* Dynamic Polarity of Life; Normativity; Normality; Georges Canguilhem.

## 1. Introduction

In *Le normal et le pathologique* by Georges Canguilhem (originally dated 1943) we find many occurrences of the expression "the dynamic polarity of life". Every occurrence is related to a tension between positive values (normal states or behaviors) and negative ones (pathological states or behaviors). The living being desires the former and refuses the latter in order to avoid or to correct them (Canguilhem 2011b: 77; Eng. tr. 1991: 126). Furthermore, according to the French philosopher, this polarity can be only attributed to living

beings, because “there is no physical or chemical or mechanical pathology” (2011b: 78; Eng. tr. 127), that is, there is no such polarity (value judgement) in mere physic-chemical substances or machines. As for anomalies, if they are not experienced as disturbing (for instance, by a human being), then they are not “provocative” for the living being and therefore it is not an object of dynamic polarity of life – in other words, life does not deal with them, nor does it care about them (2011b: 84-85; Eng. tr. 135-136). Moreover, the principle of dynamic polarity is related to the problem of biological individuality (which is rather a relation than an ontological entity – as we will see below), because every living being interacts or “discusses” in a different way with its environment about their future relations (2011b: 118; Eng. tr. 181). Since the polarity of life is constituted as a tension between two poles, the best examples are life and death, health and disease, satisfaction and dissatisfaction. The desire to be healthy is not only described as the natural behavior of a organism, but as *one of the “modes of life”* (2011b: 137 and 150; Eng. tr. 205 and 222). And finally: “Types and functions can be qualified as normal with reference to the dynamic polarity of life. If biological norms exist, it is because life, as not only subject to the environment but also as an institution of its own environment, thereby posits values not only in the environment but also in the organism itself. This is what we call biological normativity” (2011b: 155; Eng. tr. 227).

In short, the principle of dynamic polarity of life requires a certain degree (even if at the rudimentary level of existence) of decision-making, and since the living being is not an automaton, it requires also “an initiation of acting”, “a certain minimal hesitation”, as suggested by Bernhard Waldenfels (2013: 12). The *response* of an organism is different from an automatic *reaction*, even if may often be similar to such automatism.

In 1943 Canguilhem firmly stated that polarity of life is evident in rudimentary organisms and expressed by their processes of assimilation and excretion (Canguilhem 2011b: 79; Eng. tr. 128). In the essay “Le concept et la vie” (1966) Canguilhem is more cautious and rather assigns such a statement to Bergsonism, according to which “living” – at whatever level of life – means to choose and to disregard, and the assimilation is a form of generalization (208). Later, in the manuscript “Normalité et normativité” he wrote: “Wherever there is *life* there are norms. Life is a polarized activity, a dynamic polarity, and that in itself is enough to establish norms” (Canguilhem 1994: 351). Therefore, life is “an unconscious position of value” (Canguilhem 2011b: 77; Eng. tr. 127). And once more, at the entry for “Vie” in *Encyclopædia Universalis* ([1974]) Canguilhem writes: “Living means to valorize objects and circumstances of one’s own experience. It means to prefer and to eliminate the means, the situations, and the movements. Life is opposed to the relation of indifference towards the *milieu*”.

Since the institution of norms is equivalent to positing values, normality seems to be an essential feature of Canguilhem's philosophy of living. However, he was aware that in the contemporary sciences all "value-laden concepts" (*concepts d'ordre axiologique*) (2009a: 155; Eng. tr. 1988: 127) are questioned, or more precisely, rejected by a certain number of scientists. He believed that this cannot be the proper way of doing science, especially in the case of the sciences of the living being. In his study "La question de la normalité dans l'histoire de la pensée biologique" (originally dated 1973) he proposed to introduce the notion of "principle of thematic conservation" (2009a: 156; Eng. tr. 1988: 127-128). Such a principle is in fact the normality of the living being. In his opinion, biology should maintain the question of normality as a principal theme of its research. By his emphasis on normality, thus the institution of one's own norms (values), Canguilhem leads us to a new understanding of scientific work as objective exploration, which reintegrates also the subjective evaluative attitudes of living (especially human) beings.

In order to clarify this position, let me first expose some aspects of Canguilhem's approach. I start with the notions of dynamic and polarity. Then, I will shift my attention to the question of diseases and later to the problem of the precariousness and insecurity of life and values. Finally, I will try to describe the importance of valorization for the scientific work as well as for the role of philosophy in this branch of knowledge.

## 2. *Why Dynamic? Why Polarity?*

The polarity of life is understood by Canguilhem as dynamic, and yet it could be useful to detect and analyze the opposite of this notion in his perspective. Non-dynamic is, of course, what is static, but also the ontological (non-relational), what is homogenous, "pacific" or inert. The "pacific" or inert polarity is only a mere division of two poles, without any tension, without a conflict in the lived experience.

Now we can try to find the respective opposites of what is pacific and what is inert. Above all, in this sense the opposite is the polemic. This is a Bachelardian expression which is connected with the scientific, discursive, and non-intuitive or non-naïve thinking. So, it seems that the term of the dynamic polarity sounds like a kind of pleonasm – *the polemic polarity*. The two words are etymologically close, even if their etymon is slightly different. It is well known that polemic comes from the Greek word *polemos*, battle, whereas polarity comes from the term meaning a pole, a pivot, the end of an axis. Both words are frequent in Bachelard's philosophy of science. The

polemical nature of scientific discourse constitutes science as a dynamic project of mutual exchange, of common progress, of the battle between old and new science, between old and new scientific mind. This aspect lies in the discontinuity, in the overcoming of epistemological obstacles and ruptures. A continuistic model of the scientific progress is that of an inert, pacific science without revolutions, without struggles for truth. Scientific continuism is based on traditional epistemology which conceives “events of reason” only as episodes within the continual progress of the history of sciences. “Event of reason” (*l'événement de la raison*) is the notion employed by Bachelard (in his *Le rationalisme appliqué*) to describe significant breakings (crucial scientific events) disturbing the fictitious continuity of scientific progress (Bachelard 1986: 45). According to Bachelard, the polemic is the dialectic. Norms or values of the old scientific mind (old mentality of sciences, outdated and bad habits of scientists' thinking) are replaced by new norms of a new scientific mind. I want to recall that in Bachelard's poetical writings polemic is always strictly related to values, since it describes the battle between two opposite values: valorization is experienced only if every value has an equally strong anti-value as opposed, so that a dialectic interaction of poetical images is established (Bachelard 1992: 41). In *La poétique de la rêverie* he writes about “valorized matters” and about “privileged images” (Bachelard 1989: 164) which introduce dynamism of imagination in the day-dreamer's mind.

Similarly, for Canguilhem polarity means bi-polarity. Life is what stands against death or inertness; health is what struggles with disease, with the pathological. Pathological state is not understood only as a difference of level (Broussais' principle), but as something which is mainly bad or disturbing for the organism as such, for the living being in its totality. If the pathological state was conceived only as a difference of level, then suffering and pain would be only accidents, mere subjective feelings, not essential for the understanding of the pathological state. From the point of view of reductionist science and some other analytical approaches, the aberration in level is probably the common approach in the third-person vision that questions empathy. However, from the patient's (the first-person attitude) point of view disease is actually something bad, perhaps evil, *mal*. The French word *mal* signifies what is bad, but also what is sick. Canguilhem uses both the meanings of this word. The physician conceives a disease of the sick person only as an object of healing, whereas the patient considers himself the affected subject of disease. Canguilhem suggests that this understanding of experienced disease should be not reduced. Being sick bears and necessarily bears a negative value, because it indicates a poor, negative and bad state of the individual. The aim is to reach a better or optimal state by healing, and not only to reach a levelling

of deflection. However, healing is not here a return to the previous state (the state before sickness), but the foundation of the new state of the individual. The disease and the healing process change the person's biological individuality.<sup>1</sup> As Guillaume le Blanc asserts, "individuality cannot signify the being, but the relation" (Le Blanc 2000: 12). And Jean Gayon adds that disease is "the new structure of relation between an individual organism and its environment", which is, ultimately, the reason why "it is necessary to subordinate ontology to axiology" (Gayon 2000: 27 and 36). The relation of the organism to the environment (e.g. biological individuality) before, during and after sickness is different every time, because the organism as well as the – internal and external – environment is changed. Of course, biological individuality says nothing about the personal identity of a sick person. We can say that after sickness the whole organism is modified, not completely replaced. Since an organism is possible – as Kurt Goldstein suggested – only as a permanent interaction with its environment, a relation between (macro – or micro-) organisms and their environment is a kind of "discussion", *débat*, *Auseinandersetzung* (Braunstein 2007: 85). If we change a cell's DNA structure, we do not obtain any new synthetic life. What is absolutely new is the relation of the cell with its environment, as well as the cell's behavior: this is what the essence of the change of biological individuality is about.

Let me consider again disease as something which bears a negative value. For instance: in a biologist's perspective, microbes are valuably indifferent entities, neither good nor bad. Of course, they are indifferent only as independent objects of biological research and only insofar they do not have any (mainly negative) impact on the biologist's life.<sup>2</sup> This example shows us the difference between the notion of explored life (an object of scientific interest of a scientist) and that of experiencing life (a subject with the significant impact on such a human being as the scientist is). We are aware of our life, when we have a problem with it, when we are not healthy, or when we emphatically experience another person's pain. The rest of the time we live without any

<sup>1</sup> With reference to the topic of biological individuality, Elena Pagni notes that Symbiogenesis (or collaborative interactions between different forms of life) undermines "the fundamentals of reductionism and mechanistic theories that conceive living beings in terms of assembled machines: rather, Symbiogenesis perceives combinations, mutations and fusions as the three main fundamental categories for describing organisms' life and their continuity as the result of a specific evolutionary history requiring increasing degrees of discontinuity (*extended criticality*)" (Pagni 2014: 112).

<sup>2</sup> In the study "Sur l'histoire des sciences de la vie depuis Darwin", which is a part of his *Idéologie et rationalité*, Canguilhem mentions a case of 19<sup>th</sup> century biologists who were reluctant to explore microbes, because they "were stamped with a negative value by men in general and even by biologists, their positive value as objects of theoretical research was not yet recognized" (Canguilhem 2009a: 143-144; Eng. tr. 1988: 115).

awareness of our own life: we work, play, relax etc. Similarly, Bachelard says that “life in us is not an object about which we can be aware in every single moment” (Bachelard 1988: 47). The situation is related to health. Canguilhem often quoted René Leriche’s words, according to which health is life in the silence of organs.<sup>3</sup> If organs work without problem, they do not disturb us. Health is life without perceivable conflict. Health is satisfied life, whereas only few things could orient us to our finitude.<sup>4</sup> Long-lasting health is life without risks, thus it is life which is inert and without notable polemical battles. Indeed, a healthy organism also interacts with its environment, but without the subject’s awareness. The subject can freely carry out his work and activity. Ian Hacking explains the original (Kline and Clynes’) idea of cyborgs as it follows: there would be a mechanism which solves problems in the relation between body and environment independently from the subject, so that a human being (in the case described by Hacking the subject is an astronaut) can freely carry out various activities: exploring, creating, thinking and feeling – free “from the environment, especially a human-hostile environment like space” (Hacking 1998: 209). This idea leads to another one, that is a mechanism which permanently controls an organism and permits a person to not notice any kind of disease, because the mechanism take care of it, eliminates it, refuses it, makes it dysfunctional or at least imperceptible (for example, headache). To use Leriche’s words, organs keep in silence (even if damaged and continually repaired), and we can act freely, because the mechanism has inactivated all affections. Of course, this is an idea belonging to the sphere of trans-humanism, which is greatly discussed today. Trans-humanism tries to lead us to understand that human enhancement lies in stopping or eliminating human suffering, which is considered as one of the signs of “old” or traditional humanism.<sup>5</sup> We find ourselves in a confusing situation: in this case, on the one hand healing seems to be a deprivation of pain and suffering, on the other hand the enhancement of humans is an ethical dilemma, because we can pose the question if we still deal with human life or some other kind of life, as Hacking suggests at the end of his article (Hacking 1998: 215).

<sup>3</sup> Canguilhem refers to Leriche’s words really very often. See Canguilhem 2011b: 52, 59, 72, 180; Eng. tr. 91-92, 101, 118, 243; also 2009b: 211; Eng. tr. 2008: 129; and 2002a: 50. Let me also add another of his (rather ironic) statements, : “Health is not only life in the silence of organs, but also life in discreetness to social relations. If I say that I am well I block stereotypical questions before they are pronounced. But if I say that I am not well, people want to know how and why, they call for or ask me, if I am registered with social security” (Canguilhem 2002a: 62).

<sup>4</sup> “Diseases are instruments of life, by which the living being – if it is human – sees itself forced to admit that he is mortal” (Canguilhem 2002b: 48).

<sup>5</sup> For notable critical insights into the idea of trans-humanism see Tomašovičová 2014a and 2014b.

In principle, Canguilhem does not refuse those means those enhance or make human life qualitatively better and which help us to survive. He rather adds that human life integrates several spheres: biological, social, or existential (Canguilhem 2009b: 199; Eng. tr. 2008: 121).<sup>6</sup> It is possible to maintain a human body's life for a relatively long time without the given subject being aware of it (for example, *in coma*). Therefore, the subject does and does not live at the same time: the subject's life is maintained, he does not suffer. What kind of life is it? Biologically it is still life, but is it so also existentially, socially? That is the reason why Canguilhem dares to say that, for philosophers, death – and it is interesting and important the fact that he does not mention suicide or euthanasia – can also be a value: not only as a rescue (maybe not from suffering, but from an existence without an existential and social dimension), but also as a kind of value which is less than another value (for example, truth as a value in the case Jean Cavallès' death by Nazi soldiers; we know that Cavallès was Canguilhem's exemplar of ethical behavior).

### 3. *Diseases and Insecurity of Life and of Values*

Disease is a sign of the presence of death within life (Canguilhem 2002b: 47). "The fact of experiencing disease as a decline, as a 'de-valorization,' and not only as suffering or reduction of behavior, must be taken as one of the components of disease itself" (Canguilhem 2002b: 43-44). A human being in anaesthesia or in a coma is not suffering, even if his life is significantly 'de-valorized,' devoid of important positive values (for example, of free acting). What does healing mean in this case? It is not only a deprivation of pain, an alleviation of pain, but also an effort to get life in contact with some chosen values, to revalorize it. It does not mean to return to old values (norms), but to establish or to institute new values which will be plausible for the individual. Normativity of life lies in the creation of new norms. A healed human being must – as it were – arise from ashes like a Phoenix; he must discover again his reason for living. Satisfying therapy is rather orientated to the revitalization of this meaning than to the stabilization or conservation of organs.

According to Hippocratism diseases are crises, and crises are *peripeteia*, milestones, from where the biological individuality significantly changes itself and its environment; thus, diseases are an opportunity for revision, for rectification of old value schemas. Diseases are a path to progress, to re-

<sup>6</sup> When in the introduction to *La structure du comportement* Merleau-Ponty talks about nature, he calls it *organic, psychological and social* (1967: 1).

formation, to re-evaluation.

Life is not only inert, spontaneous and continual movement, but also dynamic polarity, overcoming of obstacles, e.g. of presence (Canguilhem 2011a: 270). Life is an effort to constantly revalorise itself, to avoid decline and ‘devalORIZED’ state of life. According to Canguilhem, sciences concerning human being and life are possible only on account of diseases; without them, there would be no medicine or therapy, because life would have not any need nor any reason to be interesting in terms of knowledge.<sup>7</sup> We try to know things and relations, when we need to change them: “Of course, the living body is not an object, but for a human being to live means to know. I feel well to the extent that I feel able to bear responsibility for my acts, to create things and to constitute relations between them that would not exist without me, but would be not what they are without them. And so I need to learn what they are in order to change them” (Canguilhem 2002a: 68).

It is clearly necessary to distinguish curable from incurable diseases. They are all crises; all of them change biological individuality, because “the battle of the organism through the creation of antibodies is a reference to biological individuality” (Canguilhem 2002b: 45). Nonetheless, in the case of curable diseases, the patient on one hand and the physician on the other await some kind of return to the original state of organs. Indeed, according to Canguilhem such a return is not possible, because what is possible is only a change-over, a conversion, the mutation of the relationship between the organism and its environment. In the case of incurable diseases the situation is quite different. Both the patient and the physician know that no return is possible and they know it from the diagnosis. Therapy is not only tentative, an attempt to reverse a bad situation, but also an effort to resign to things. The patients are led to re-evaluate their possibilities and if possible to explore every (even the yet unexplored) path, to see either if there is an interest to live the rest of one’s life normally (even if it means not to follow “good old” norms) or if there is an interest to not live one’s own life only as a cheerless expectation of the end. Diseases – regardless of whether they are curable or incurable – indicate the precarious nature of life.

Canguilhem ([1974]) poses the question: “Is the value of life, life as a value, rooted in the knowledge of its essential precariousness?” The notion of precariousness (insecurity, instability) seems to be essential. Life is not a static relation, but a perpetual tension. Similarly values are insecure by virtue of their

<sup>7</sup> This is the ambiguous meaning of the title of Canguilhem’s book *La connaissance de la vie*. Paola Marrati and Todd Meyers (2009: ix) are right, when they write in the foreword to English translation of the book that its title “is simultaneously and inseparably the knowledge we have of life when we take it as an object, and the knowledge that life itself produces”.



typically polemical nature. Therefore, the insecurity of life and values is based on this essential dynamic. Canguilhem does not assert that values are relative, but that they are insecure, that we need permanently to struggle in order to keep them. But holding onto old values leads also to dissatisfaction, because a new situation requires new relations.

However, what is valuable for an individual is not exactly what we have analytically conceived and recognized. There may be not any correlation between the analytical recognition that a certain food contains substances providing more nutrition and the food that we usually consider more valuable for us. Analyses aim at objectively more nourishing food, not at subjectively valuable food (for example, edible insects abound in proteins and so on).<sup>8</sup> Canguilhem states that “study of alimentation does not consist solely in establishing a balance sheet, but in seeking, within the organism itself, the sense of the organism’s choice – when free in its milieu – to seek sustenance in such and such species or essences, while excluding others that could, theoretically speaking, procure it equivalent energetic provisions for its maintenance and growth” (Canguilhem 2009b: 15; Eng. tr. 2008: xix-xx). Analysis offers something which seems to be more useful for life conservation, but because life does not lie only in the self-conservation of its physiological state, but prefers what is valuable to it in a different sense.

The philosopher is here tempted to see the biological problem of preferences in a broad (moral, social) sense: making a sacrifice by reason of “higher purposes”, asceticism, heroism, or, conversely, hedonism. There are social and moral values which can seem to be more important than the mere conservation of biological or even personal life. But if a low organism prefers less nourishing food, it is neither a form of asceticism nor of hedonism. To say it, it would be nothing more than naïve anthropomorphism. Canguilhem demonstrates that such an extension from vital to social structure *et vice versa* can be a case of ideological discourse.

However, how can we attribute a sense to something that is as precarious as life? What is a life value in the case of a human or animal body in coma? All norms are out of play. Life is conserved from outside. Of course, a body in coma is situated in a “narrow milieu” – as Goldstein called it (1995: 199); it is certainly some kind of “a new plane of ‘existence’ [...] *restricted, abnormally concrete world*” (Goldstein 1971: 433). But we can ask in which sense coma could be a narrow world in the sense of an asylum (Merleau-Ponty 1967: 190,

<sup>8</sup> See the study of the Food and Agriculture organization of the United Nations: Van Huis, Arnold *et al.*, 2013, “Edible insects. Future prospects for food and feed security” (online), FAO, Rome, viewed March 10, 2015, URL: <http://www.fao.org/docrep/018/i3253e/i3253e00.htm>.

fn. 1). The value of surviving makes sense, but only if there is the hope that the individual will be reintegrated into some kind of ordinary life again in the future. That is the reason why for Canguilhem health is not only life in the silence of organs, but rather a biological luxury: “being able to fall sick and recover” (Canguilhem 2011b: 132; Eng. tr. 1991: 198-199).

Health and disease as value and anti-value are a matter of the biological individual as a whole. According to Canguilhem it is not right to talk about sick tissue or a sick cell; in reality it is the suffering individual who is sick and whose freedom to choose is limited. Consideration of health is meaningful “only at the level of the organism or ‘individual totality’” (Giroux 2010: 26). This shows that Canguilhem tries to develop a biological axiology (or – I dare say – a form of minimal ethics, *proto-ethics*) rather than a biological ontology. However, he is far from extending his conclusions to the social, political or moral sphere of human beings.

#### 4. *Conclusion: Life as a Valorizing Activity*

In his study “Le concept et la vie” Canguilhem mentions Bergson, who believed that it is not only “the ready-made, macroscopic organism what generalizes. All that is living, as a cell, as a fibre – all this generalizes. Living at whatever level means to choose or to refuse. Bergson refers to assimilation and he conceives it in all its semantic ambiguity” (Canguilhem 1966: 208). According to Bergson, assimilation (Latin verb *assimilare* means to make things similar, the same) is on one hand a reduction of the variously received nutriment to the substance of the fed animal (nutriment becomes a part of the animal) and on the other it is also “a way of treating indistinctly, indifferently what one assimilates. The difference lies in what is kept and what is removed. In a human being there is a generalization of vital nature, which is a middle step between impossible generalization (everything is different) and ineffective generalization (everything is the same)” (Canguilhem 2002: 350). By the way, this recalls the distinction made by Bachelard in *La rationalisme appliqué* between the notions *recevoir* and *réceptionner*, thus between receiving indifferently what is given and a special kind of receiving that consists in selecting something from what is generally given (Bachelard 1986: 43).<sup>9</sup> Similarly, in *Idéologie et rationalité* Canguilhem writes about the “phenomenology of the first thing that comes to hand” (Canguilhem 2009a: 48) by which he means – we could say – the phenomenology of *recevoir* in Bachelard’s sense. The different approach

<sup>9</sup> I broadly discuss this topic in Vydra 2014: 51.

would be the phenomenology of *réceptionner*, the phenomenology of valorized phenomena, of chosen (selected, privileged) and of refused phenomena. Such selectionism has not only features of lucid consciousness, because we can also find it at a rudimentary level of life, for example in cells. However, in rational beings it may also be not a conscious decision-making, even if it would not be appropriate to define it an automatic behavior. Selection and exclusion are not automatisms. By these notions we return to Waldenfels' notion of *minimal hesitation*, which is determining for the normativity of an organism at whatever level of perfection. But choosing something as valuable and refusing another as unvalued means to *discriminate*. However, such a discrimination is "the emergence of norms", "the institution [*Stiftung*] of norms" as Anthony J. Steinbock writes, adding that: "In the evaluative experience of norms, organic life is not 'detached' in relation to its conditions of life and does not merely assess a 'fact' in relation to a 'norm'" (1995: 150). A refused norm is not only deviated from a new one; it is evicted, rejected. In the vital sense, discrimination means generalization, it is a form of classification, of vital taxonomy: valuable norms on one hand and unvalued ('de-valorized') ones on the other.

But Canguilhem is indeed far away from Bergson's intuitivism and at the end of the article "Le concept et la vie", he expresses himself quite differently and according to the information-model of life, but the choice or the decision-making is still latently present here in the labyrinth-like or wandering image:

Life overcomes error through further trials (and by 'error' I mean simply a dead end). [...] In fact, human error is probably one with human errancy. Man makes mistakes because he does not know where to settle. He makes mistakes when he chooses the wrong spot for receiving the kind of information he is after. But he also gathers information by moving around, and by moving objects around, with the aid of various kinds of technology. Most scientific techniques, it can be argued, are in fact nothing more than methods for moving things around and changing the relations among objects. Knowledge, then, is an anxious quest for the greatest possible quantity and variety of information (Canguilhem 1966: 223; Eng. tr. in 1994: 319).

A dead end in a labyrinth or in a street generates anxiety in the human being who is looking for a safe place. But errancy or wandering, the inability to stop, to take place is an image of human dissatisfaction. The phenomenology of "moving around", of gathering (more and more detailed) information is an amazing image of life which permanently makes new decisions. Waldenfels' notion of *minimal hesitation* is again at work here. But reading information means also to interpret and to arrange it. One kind of information seems to be important; another seems to be insignificant. I say: "it seems to be", not "it is". Values are not facts. So, which are the criteria that establish what is important

and what not? Where does this blind valorization come from? Now we are prepared to make a return to the dynamic polarity of life. Because this is the nature of life: to discriminate, to valorize and to 'de-valorize' nutrition, things, relations, states of organism, information, whatever. Life is not only a valorized phenomenon, but also a valorizing activity. There is a distinction between choosing the perfect possibility and choosing the preferred one. The former belongs to scientific work (carried out today mostly by computers as instruments of precision); the latter is a feature of the normativity of living beings.

### References

- Bachelard, Gaston, 1986, *Le rationalisme appliqué*, Quadrige/PUF, Paris [first published 1949].
- Bachelard, Gaston, 1988, *Fragments d'une Poétique du Feu*, PUF, Paris.
- Bachelard, Gaston, 1989, *La poétique se la rêverie*, Quadrige/PUF, Paris [first published 1960].
- Bachelard, Gaston, 1992, *La terre et les rêveries du repos: Essai sur les images de l'intimité*, José Corti, Paris [first published 1948].
- Braunstein, Jean-François, 2007, "Psychologie et milieu : Éthique et histoire des sciences chez Georges Canguilhem", in Braunstein, Jean-François, ed. Canguilhem. *Histoire des sciences et politique du vivant*, PUF, Paris: 63-89.
- Canguilhem, Georges, [1974], "Vie", in *Encyclopædia Universalis* [online], Paris, viewed March 10, 2015, URL: <http://www.universalis.fr/encyclopedie/vie/>
- Canguilhem, Georges, 1966, "Le concept et la vie", in *Revue Philosophique de Louvain*, 64, 82: 93-223 [reprinted in Canguilhem, Georges, 2002, *Études d'histoire et de philosophie des sciences concernant les vivants et la vie*, J. Vrin, Paris: 335-364].
- Canguilhem, Georges, 1994, *A Vital Rationalist: Selected Writings from Georges Canguilhem*, Eng. tr. by Arthur Goldhammer, Zone Books, New York.
- Canguilhem, Georges, 2002a, "La santé : concept vulgaire et question philosophique", in Canguilhem, Georges, *Écrits sur la médecine*, Seuil, Paris: 49-68.
- Canguilhem, Georges, 2002b, "Les maladies", in Canguilhem, Georges, *Écrits sur la médecine*, Seuil, Paris: 33-48.
- Canguilhem, Georges, 2002c, "Une pédagogie de la guérison est-elle possible?", in Canguilhem, Georges, *Écrits sur la médecine*, Seuil, Paris: 69-99; Eng. tr. by Steven Miller 2006, "Is a Pedagogy of Healing Possible?", in *Umbr(a): Incurable* 10: 9-21.
- Canguilhem, Georges, 2009a, *Idéologie et rationalité dans l'histoire des sciences de la vie*. Vrin, Paris [first published 1977]; Eng. tr. by Georges Goldhammer 1988, *Ideology and Rationality in the History of the Life Sciences*, The MIT Press, Cambridge-London.
- Canguilhem, Georges, 2009b, *La connaissance de la vie*, J. Vrin, Paris; Eng. tr. by Ste-

- fanos Geroulanos and Daniela Ginsburg 2008, *Knowledge of Life*, Fordham University Press, New York.
- Canguilhem, Georges, 2011a, "Divertissement philosophique – discussion sur le temps selon Kant", in Canguilhem, Georges, *Œuvres complètes 1: Écrits philosophiques et politiques 1926 – 1939*, J. Vrin, Paris: 268-271.
- Canguilhem, Georges, 2011b, *Le normal et le pathologique*, Quadrige/PUF, Paris [first published 1966]; Eng. tr. by Carolyn R. Fawcett 1991, *The Normal and the Pathological*, Zone Books, New York.
- Gayon, Jean, 2000, "Le concept d'individualité dans la philosophie biologique de Georges Canguilhem", in Le Blanc, Guillaume, ed. *Lectures de Canguilhem : Le normal et le pathologique*, ENS Éditions, Lyon: 19-47.
- Giroux, Élodie, 2010, *Après Canguilhem : définir la santé et la maladie*, PUF, Paris.
- Goldstein, Kurt, 1971, "On Emotions", in Gurwitsch, Aron *et al.*, eds. *Selected Papers/Ausgewählte Schriften*, Martinus Nijhoff, The Hague.
- Goldstein, Kurt, 1995, *The Organism. A Holistic Approach to Biology Derived from Pathological Data in Man*, Zone Books, New York.
- Hacking, Ian, 1998, "Canguilhem amid the cyborgs", in *Economy and Society* 27, 2-3: 202-216.
- Le Blanc, Guillaume, 2000, "Présentation", in Le Blanc, Guillaume, ed. *Lectures de Canguilhem : Le normal et le pathologique*, ENS Éditions, Lyon: 9-16.
- Marrati, Paola, and Todd Meyers, 2009, "Life, as Such", in Canguilhem, Georges, *Knowledge of Life*, Fordham University Press, New York.
- Merleau-Ponty, Maurice, 1967, *La structure du comportement*, PUF, Paris [first published 1942].
- Pagni, Elena, 2014, "Individuality and Incorporation: Renewing the Concepts of 'Life' and 'Biological Organism'", in *The Yearbook on History and Interpretation of Phenomenology 2013: Person – subject – organism: An Overview of Interdisciplinary Insights*, 1: 97-112.
- Steinbock, Anthony J., 1995, *Home and Beyond: Generative Phenomenology after Husserl*, Northwestern University Press, Evanston, IL.
- Tomašovičová, Jana, 2014a, "Heideggers Humanismuskritik und der gegenwärtige Transhumanismus", in *The Yearbook on History and Interpretation of Phenomenology 2013: Person – subject – organism: An Overview of Interdisciplinary Insights*, 1: 139-156.
- Tomašovičová, Jana, 2014b, "Život v zóne biomoci. Etický a biopolitický diskurz o transhumanizme", *Filozofia*, 69, 6: 461-471.
- Van Huis, Arnold *et al.*, 2013, "Edible insects. Future prospects for food and feed security" (online), FAO, Rome, viewed March 10, 2015, URL: <http://www.fao.org/docrep/018/i3253e/i3253e00.htm>.
- Vydra, Anton, 2014, "Gaston Bachelard and his reactions to phenomenology", in *Continental Philosophy Review*, 47, 1: 45-58.

Waldenfels, Bernhard, 2013, "Zrod étosu z pátosu. Cesty responzívnej fenomenológie"  
[The Birth of Ethos from Pathos: The Ways of Responsive Phenomenology], in  
*Filozofia*, 69, Supplementary Issue No. 1: 4-15.

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