

THE CONCEPT OF ORGANISM IN HEGEL'S PHILOSOPHY OF NATURE

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Abstract. *I focus my attention on the conceptualization Hegel offers of the organism in his philosophy of nature. The aim of my paper is to show the naturalistic roots of the notions of subject. Through this path I also intend to shed light on the way the connections between these different notions – organism, subject, freedom – are capable of producing a certain re-definition and re-determination of the immediate use of the terms with which these are usually represented in ordinary language and the way they appear, prima facie, in Hegel's system. This process of conceptual re-definition and re-determination of the terms that are here at stake could also be of some interest in relation to the philosophical debate of these last decades on naturalism and anti-naturalism. More specifically, it could shed light on the different ways of inflecting the notion of naturalism in philosophical context.*

At the beginning of the third part of the philosophy of nature in the *Encyclopaedia of the Philosophical Sciences* (1830), Hegel describes the organism as «*an impregnated and negative unity, which by relating itself to itself, has become essentially self-centred and subjective*»¹. To understand what these determinations constituting the fundamental characteristic of the organism are, it is necessary to look at that part of organic physics where Hegel discusses the significance of the life of animals. Unlike rocks and plants, where these characteristics are only formally or directly disclosed, but not effectively and fully realized, it is with animals that they are actually concretized.

The concept characterizing the animal sphere is, first of all, that of *subjectivity*, a notion thematised for the first time in Hegel's systematic development of a naturalistic context. But in what

¹ G.W.F. HEGEL, *Enzyklopädie der philosophischen Wissenschaften im Grundrisse* (1830), GW, Bd. 20, hrsg. von W. Bonspian u. H.-C. Lucas, unter mitarbeit von U. Rameil, 1992, § 337 (henceforth: Enz. C).

sense is it possible to say that animal is subjectivity? What does Hegel mean by stating that the animal's way of being is a subjectivity's way of being? Animals are thus described in the 1817 *Encyclopaedia*:

Organic individuality exists as subjectivity insofar as its individuality is not merely immediate actuality but also and to the same extent suspended, exists as a concrete moment of generality, and in its outward process the organism inwardly preserves the unity of the self (*die selbstische Sonne*)².

To understand these words, and especially what Hegel means with the idea (which disappears in the English translation) that the animal, in its relation to the outside world, still has a sort of *selbstische Sonne* – an image that summarizes on a representative level the meaning it has in Hegel – it is necessary to explain the way plants had been conceived: incomplete organisms, characterized by a peculiar immediacy. Such immediacy implies that on one hand, plants cannot be authentic unities within difference. On the other hand, as plants have their determinacy outside themselves, they revolve around something else (the sun, or more generally, light)³. What makes plants a partial and immediate realisation of the concept of organism is their specific characteristic that, in Hegel's words, they have another *self outside themselves*, an outside unity towards which they tend and on which they depend. This self outside themselves is primarily light, towards which plants turn, and that on them has the strongest power. In fact, plants do not move of their own accord, but are conditioned in their movements⁴.

The main element of animal subjectivity is the negation of such immediacy, appearing as a sort of liberation from the

² Cf. G.W.F. HEGEL, *Encyclopädie der philosophischen Wissenschaften im Grundrisse* (1817), in GW, Bd. 6, § 273 (henceforth Enz. A).

³ Enz. A, § 269.

⁴ Hegel thus writes: «light is this physical element outside the plant towards which it turns the same way man searches for other men» (G.W.F. Hegel, *System der Philosophie*, in G.W.F. Hegel, *Sämtliche Werke*, Jubiläumsausgabe in 20 Bänden, hrsg. von H. Glockner, Bd. 9, Frommann, Stuttgart 1929, § 344 Z, p. 500).

dependency that characterises plants in their relation with natural elements. The structure of an animal is such that the target towards which it aims is not, as with plants, external. Instead, it identifies with itself⁵. Even when the organism's activity, starting from the *need* it is experiencing, moves away from its singularity and towards what is other, it always realizes itself. This means that the animal, in its inward activity, has a movement that, in moving outward, always has in itself its objective and its centre. This makes it a *subject*.

Since it has in itself its centre – the centre around which its activity revolves, animal subjectivity is, according to Hegel, a *concrete unity*. It is not simply a formal unity, as in plants, where the parts are independent from the whole, and capable to keep on living once severed from the whole giving birth to new consistent wholes. That of animals is a *concrete unity* since it realizes through difference and internal ramifications. It is a unity in which the parts constitute the whole in a way that if they were separated from each other, they would stop being what they are, losing their coherency. The concrete unity of animal subjectivity is what makes animals individuals in an actual and tangible sense, a way of being that cannot be divided without being nullified in its ontological structure. Such structure is always one with itself, even in its internal ramifications and always becoming other than itself⁶.

As subject, the animal has in itself the core of the principle of its unity and thus differs greatly from both rocks and plants as being the only one capable of self-movement. It is the only one capable of not being under – even if only partially – the control

⁵ Karl Heinz Ilting and Franco Chiereghin have discussed this passage from plants to animals. See: K-H. ILTING, *Hegels Philosophie des Organischen*, in *Hegel und die Naturwissenschaften*, ed. by Michael J. Petry, Frommann-Holzboog Stuttgart-Bad Cannstatt 1987, pp. 349-368; F. CHIEREGHIN, *Finalità e idea della vita*. La recezione hegeliana della teleologia di Kant, «Verifiche», 19 (1990), pp. 127-229. On the analogy of animal and sun see: G.W.F. Hegel, *System der Philosophie*, § 350 Z, p. 576-577.

⁶ Animals are the concrete realisation of life in nature since «it is the one that has all the parts in their freedom unites in it. It divides in it, gives them universal life and sustains them in itself as their negative, their force» (G.W.F. Hegel, *System der Philosophie*, § 342 Z, p. 491).

of exteriority (light, gravity, etc.) and to self-determine according to its location, but also its own needs and reasons. It is not a case then that in the very final section of organic physics the idea of *freedom* appears for the first time. For Hegel, the concepts of subject and freedom are deeply connected, to the point that the two words are sometimes used to express one another. Animals' subjectivity is expressed precisely in the capacity to free from the necessary bond of the external forces that prevent the plant from even the smallest form of self-determination (and thus freedom).

Hegel connects and explains the animal's possibility and capability to change its dwelling place as the peculiar relation that it has with *time*. If the plant has to rely on light, especially when it comes to its movements, it is also dependent on nature's cyclical passing of time for its growth, nutrition and reproduction. Animals instead, require what Hegel calls «free time»⁷. This expression means that animals are, to a certain extent, independent from the external and natural time to which plants are subjected, which makes them *autonomous* and capable of *self-determination*. This *free time* manifests itself through self-movement, which cannot be merely understood as moving from one place to another. It is «ideal» self-movement, a condition that is origin to all those characteristics that define the animal way of being and that constitute the particular determinations that will eventually find new development at the level of spirit. These are the vocal faculties, animal *heat*, the *interrupted intussusception*, and, above all else feeling (*Gefühl*).

The vocal faculty is, for Hegel, the organism's expression of «free vibration *within itself*»⁸ and in this sense expression of its subjectivity. Surely, the *Stimme* that characterizes animal subjectivity is not yet concretized in the symbolic production that will be recognized, at spirit's level, of actual language. However, the *Stimme*, as manifestation of the animal's subjectivity in its expression, exteriorization of its interiority, pain, satisfaction or feelings, can be read as a sort of natural precondition to that symbolic ability that will develop only at the level of spirit. Vocality is not

⁷ Enz. C, § 351.

⁸ *Ibidem*.

simply the consequence of some internal mechanism of the organism. Since it is exteriority of self-movement, it is self-production, a phenomenon through which animals express their self to give a form to their subjectivity and to their *Gefühl*. Only because the animal feels, it can express through its voice what could be called, without necessarily implying self-consciousness, its Self. *Gefühl* constitutes the determination through which the animal feels itself, its own self, submerged in pain, pleasure, satisfaction or suffering, in all situations which the *Stimme* can exteriorize and objectify.

The animal's subjective structure is further expressed by Hegel in the context of the relation with the outside world, which is an assimilative process. This relation begins through subjective *feeling*, connected to the self. And the first feeling is loss. Thus, animal subjectivity develops as the «push to suppress»¹⁰ such sense of loss. The assimilative process starts from a specific need determined by a structural deficiency, and by *possibility*, a characteristic found only in living beings and that determines their intimately subjective structure to feel such need and deficiency¹¹. Deficiency, need, intended as the perception of such deficiency, and the push to satisfy that need are fundamental elements in Hegel's conception of living beings and natural subjectivity. The living being first of all has a need, which is an integral aspect of its essence. This means that if a living being did not have needs or deficiencies, it would not be a living being anymore. Any living organism, no matter its size or complexity, needs to demolish and rebuild its constitutive materials through its metabolic activities: assimilation, transformation and elimination. Being in need is the way a living being exists, and through the processes of transformation and

⁹ *Ibidem*.

¹⁰ Enz. C, § 359.

¹¹ «Only living being feel loss» (Enz. '30, § 359 An.). In *The Science of Logic* Hegel writes: [G.W.F. Hegel, *Wissenschaft der Logik. Zweiter Band. Die subjektive Logik (1816)*, Gesammelte Werke, Bd. 12, hrsg. von F. Hogemann u. W. Jaeschke, Meiner, Hamburg 1981, pp. 187-188 (trad. it. p. 874)]. See also G.W.F. Hegel, *System der Philosophie*, § 358 Z, p. 632. It is important to underline that pain is not the same thing as loss – otherwise it would not be a living being privilege. It is the capacity to feel it.

modification takes in what is other from it, using for its own construction of what is external.

A living being is in constant transformation, in a process in which the organism acts on itself and on the outside world in order to continue being in transformation, to keep on being itself. This being in constant need in order to exist (*die Tätigkeit des Mangels*) is what differentiates living from inorganic matter, which is always the same and does not have any constitutive lack¹². Saying that the living organism is marked by its need does not mean saying that it needs something else to be considered a whole. Therefore an organism needs something to be itself the same way a car needs gas. A living being is a process and it never stays the same. If two stages of this process were absolutely identical we could say that the being has ceased on living. However, it can still be defined as a system that is always a unitary whole¹³. Thus, deficiency is not simply a weakness that can be overcome, or realizing that there is a missing piece that prevents the system from working. Deficiency is integral to life. If it is true that we consider complete beings that are complete *vis-a-vis* their constitution, and that life is acting on a deficiency, what life needs is need itself. Without it, life would not be life¹⁴. Deficiency and need cannot be understood as defects or interruptions that can be solved to gain constant fulfilment. Life's peculiarities and potentialities are not different from the negativity of need. They are entangled in this way of being.

¹² The expression *activity of lacking* (*Thätigkeit des Mangels*) is used by Hegel to determine the structure of *impulse* (*Trieb*) belonging to living being. See G.W.F. Hegel, *Zum Mechanismus, Chemismus, Organismus und Erkennen*, in *Gesammelte Werke*, Bd. 12, hrsg. v. F. Hogemann u. W. Jaeschke, Meiner, Hamburg 1985, pp. 259-298, in part. p. 280. In relation to this text and its value for theory in general and Hegel specifically, see the Italian edition G.W.F. Hegel, *Sul meccanismo, il chimismo, l'organismo e il conoscere*, trad. it. L. Illetterati introduction and comments, Trento 1996, p. 54.

¹³ See H.R. MATURANA - F.J. VARELA, *Autopoiesis and Cognition. The realization of the Living*, Kluwer, Dordrecht 1980.

¹⁴ To clarify the many meanings of *necessary*, Aristotle says «*necessary* means what it is impossible to live without». Breathing, eating. (ARISTOT., *Metaph.*, V, 1015 a 20 sgg.). But since need, food and air are a form of deficiency, it can be said that lack itself is necessary.

Animals, then do not simply lack something, but they also live and experience this deficiency within themselves. It is because of this feeling of lacking something, and the consequent inherent contradiction and pain, that the living being is the real subject.

The *subject* is a term such as this, which is able to contain and *support* its own contradiction; it is this which constitutes its *infinity* (Enz. '30, § 359 An.).

The infinity connected to the subject in the passage above has to be understood as the possibility it has to let go of the concrete shapes of need and deficiency. The subject's infinity is its capacity to perceive its contingency, to express its negativity, to live its limit and to push it. It is thus revealed how the subject can transcend itself the very moment it is determined as limited. Thus the subject's essential finiteness, its limitation and structural insufficiency emerge as biological conditions. The tension the organism experiences to overcome its condition, to pass the limit, to satisfy its restlessness pushes it to engage with the outside world, and makes it what it really is.

In this sort of double process, where animal subjectivity perceives itself and finite, and transcends its limits, only to discover itself, once again, as finite, is particularly evident in Hegel's analysis of sexual relations and reproduction. In reproduction and sexual relations, individuality opens to the outside world in the hope of finding in another individual the completeness it lacks, to integrate, through this union, its ontological weakness, and "to bring the genus into existence by linking itself into it"¹⁵.

¹⁵ Enz. '30, § 369. On similarities and differences between gender, Hegel insists in the 1805/06 Jena *Naturphilosophie* where he analyses sexual organs and quotes specific researches such as J. F. Ackermann's and G. H. Schubert's (see JS III, pp. 173-174). It is possible to see a correspondence between men's testicles and women's ovaries, for instance, but beside all the possible analogies, there is an essential difference, whereby the female is characterized by being indifferent and the male instead by opposition and by the division, from which follows that the male is the active element, the bearer of the principle of subjectivity, while the female is receptive, the matter must take the form (see JS III, p. 173-174). The reference to the ancient Aristotelian theory, according to which the male provides the form and principle of change (*archén*

The other individual shares the same sense of deficiency, fragility and insufficiency («that feeling of insecurity»¹⁶, Hegel says) that pushed it to look outside. However, this attempt is inevitably a desperate one. Unlike what is described in Aristophanes' tale in Plato's *Symposium*, sexual relations are not the integration and mutual fulfilment of two finite and isolated entities. Rather, they are the reason for the birth of a new individual, a new singularity that has the same feeling of deficiency and ontological inadequacy as the other two. The attempt to overcome such inadequacy is both reason and origin of its existence. The individual's struggle is solved in nature with that bad infinity to which the individual is destined to succumb:

This process of propagation issues forth into the progress of the spurious infinite. The genus preserves itself only through the perishing of the individuals, which fulfil their determination in the process of generation, and in so far as they have no higher determination than this, pass on to death¹⁷.

The genus exists only through the death of the individual, and thus is a higher form of life than the single entity, which is always divided in its universality. It is a natural form of life that however, sometimes, also transcends nature:

In this new life, in which singularity is removed, subjectivity is maintained, and the genus has become, for itself, reality, becoming something higher than nature¹⁸.

tés kinéseos), while the female the body and matter, is obvious here (ARISTOT., *De generat.* 1, 729a). The reference to Ackermann, who taught anatomy at Jena in 1804, is not devoid of interest because his works were probably a significant influence in the scientific training of Hegel. Ackermann had already published in 1806 a work in which he undertook to show the unsustainability, from a scientific point of view, of the phrenology of Gall against which Hegel wrote against at the same time in the *Phenomenology of Spirit*. Ackermann's work, published in Heidelberg in 1806, is entitled *Die Gall'sche-Hirn, Skull-, Organ- und Lehre vom Gesichtspunkt der Erfahrung* Enz.

¹⁶ Enz. '30, § 369, An.

¹⁷ Enz. C, § 370.

¹⁸ Enz. A, § 291.

Spirit is what is higher than nature. Here, a reconfiguration between individual and universality occurs. This reconfiguration is gradual and it is never fully free from objectification, apart from the moments of complete awareness. Nature and the outside world that it embodies, and the tear of deficiency that it manifests in its most complex form, do not disappear in this reconfiguration. It gains a new and different meaning that reorganizes and gives new structure to that very same exteriority, deficiency, and need. In animal subjectivity nature – which is primarily exteriority – is fulfilled. Here nature reveals its conceptual structure that, in all its other manifestations, was always only internal and separated from any objectivity. If fulfilment is acknowledgement and revelation of what it really is, nature, through animal subjectivity, reveals a peculiar tendency to go beyond nature itself and that strict necessity that, according to Hegel, is a necessary characteristic of nature and being other. What is interesting is that this movement to overcome this strict law of nature does not act from the outside. It is in nature itself, thus allowing and making necessary a redefinition of the concept of nature itself.

The broader conception of nature that makes Hegel think about the relation between nature and spirit as different, but never opposed world, does not seem to be unrelated to nature's essence. The structure of subjectivity and the consequential freedom are not the outcome of some kind of *infection* of spirit on nature, or of an external influence that initiates something that would otherwise remain unscathed from this type of dynamics. Life is a manifestation of nature. The structure of subjectivity and the freedom that exists in it are nature's highest achievement in terms of organization and structure. According to Hegel, the limitations of physical reductionism (and of strict naturalism) do not appear out of anti-naturalistic assumptions, but from the radical consideration of nature's essence. From a certain perspective, Hegel's position seems, on one hand, to go towards a *naturalization of the subject*, showing how the subject's way of being (the subject is intended here as a structure revolving around itself, autonomous and self-determined) develops primarily in nature and, specifically, in animals. On the other hand, however, it also involves a redetermination of the idea of nature

with a process that can be seen as sort of *denaturalization of nature*, and that Hegel would describe as unilateral, intellectualistic and reductionist.

Finding the genesis of subjectivity in nature prevents from thinking about it as a disjunctive element, as something that would appear only after nature and within the social practices and dynamics connected to it¹⁹, or as the bursting in of a supernatural principle on a natural layer. However, understanding nature as the place where the subject literally takes shape prevents seeing it as simple exteriority with no freedom, the way in which, at least *prima facie*, it is constituted within a systematic structure. Thinking about the subject and about freedom in a radically naturalistic way prevents seeing nature and spirit as juxtaposed, as if opposing a determined-by-necessity nature with an independent supernatural reality. The contraposition between nature and spirit starts, instead, from abstract conceptions of both notions. Through this process of conceptual redefinition aimed at overcoming intellectualistic abstractions, Hegel attempts to show spirit's development in nature and nature's redefinition in spirit. In this perspective, *second nature* is not only erasing *first nature* – what Hegel would have called *natural nature* – but it is a new redefinition of the complex human structure, of the subjective structure of man as an organism.

Second nature, the grounds on which the human way of being and spiritual world develop, is rooted in human being's free subjectivity, in his being a development of those characteristics that essentially define animals as such. Hegel aims at solving any form of dualism characterising some of the relations with the outside world and that are the origin of a certain spiritual and physical

¹⁹ The argument here highlights the limits of the interpretations of Hegel's philosophy, which emphasized the social dimension as the original place where the structures of subjectivity and freedom are revealed. It is in many ways around this problem that the controversy between J. McDowell and Robert Pippin develops. *Nature Leaving behind* that Pippin wrote against McDowell implies a conception of subjectivity and freedom in Hegel that is intended to show the elements that break nature and that are irreducible to any form of rationalism. Equally apparent in Pippin in his polemic against DeVries' emergentist Hegel.

reductionism. For Hegel, spirit is not simply something different from nature. This dichotomy, to use Wittgenstein's terms, is a classic conceptual pathology. Spirit cannot appear unless the natural bonds where it originates and develops are recognized. And if spirit is not different from nature, since it arises from human beings' nature, it is clear that such condition necessitates a further development of the concept of nature.

The opposition to a physicalist reduction of nature does not produce a spiritualistic ontology, nor a reduction of reality to the mind, as in a classical but radically idealistic reading. Materialism and spiritualism have sense only within the abstract and opposing logic that maintains them. They are unilateral determinations that, in the overlaying dualistic vision, are each other's reversal. The appearance of subjectivity within nature, and the decline of animal subjectivity through relations that require freedom is proof of the need to let go (also in a therapeutic sense) of all the dualisms and abstractions that are at the origin of many forms of reductionism. This need is the fulfilment of Hegel's system in its divisions as logic, philosophy of nature and philosophy of spirit, and its development as a whole in which every part makes sense only in relation with the others and with the whole.