

External or Intrinsic Purpose—What comes first? On Hegel’s Treatment of Teleology

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Abstract

Hegel’s philosophy of biology is one of the strongest chapters of Hegel’s *Philosophy of Nature*. It can be argued that Hegel’s understanding of organicity underscores the explanatory power of ‘dialectical thinking’, as Hegel himself claims. Hegel’s interpretation of organicity is based upon the logical development of categories in his chapter on Objectivity of his Logic. If we compare Hegel’s treatment of teleology in the Logic with his interpretation of organicity in his Philosophy of Nature, a mismatch can be found. In the Logic, Hegel introduces the notion of life (*Leben*) after the chapter on Objectivity, i.e. after elaborating on external teleology. In his Philosophy of Nature, the notion of the inner purposiveness of organicity belongs to the externality of nature. This article compares Hegel’s treatment of teleology in his Logic and his Philosophy of Nature, reconstructs possible explanations for mismatches and offers a possible solution to the question whether the notion of life should be regarded as the last part of the chapter on teleology or the first part of the chapter on the Idea.

I. Introduction

It can be argued that Hegel’s philosophy of biology is one of the strongest chapters in Hegel’s Philosophy of Nature.¹ It can further be argued that Hegel’s understanding of organic life underscores the explanatory power of ‘dialectical thinking’, as Hegel himself claims.^{2,3} To make good on these claims would require us to interpret and apply Hegel’s notion of teleology in regard to the phenomenon of organic life and to evaluate its fruitfulness in detail.⁴ I am certain that a strong case can be made that a Hegelian understanding of organicity will enrich contemporary philosophy of biology precisely because Hegel’s understanding of ‘teleological relations’ in nature helps us to overcome many one-sided debates of our still prevalent Cartesian picture of nature. In other words, a detailed reconstruction of Hegel’s logical consideration of teleology can offer us some of the categories that are needed for a contemporary philosophy of nature.⁵

In this essay, however, I will approach Hegel’s philosophy from a different perspective. What can we learn about Hegel’s treatment of teleology and the

‘Idea of Life’⁶ in his Logic if we start out by looking at the corresponding passages in his Philosophy of Nature first?

It will be argued that Hegel’s Philosophy of Nature presents the notion of life in the ‘Organic Physics’ as a ‘true synthesis’ that unites the relations between natural objects that were discussed in the chapters on ‘Mechanics’ and ‘Elementary Physics’ in a way that is strikingly similar to the development of the notion of teleology in Hegel’s chapter on Objectivity in the Logic. However, within the Logic, the notion of extrinsic teleology is introduced first, while the discussion of the notion of life as ‘intrinsic teleology’ is postponed and placed at the beginning of the next chapter: ‘Life’ is the first aspect of ‘The Idea’, while ‘Teleology’ is the last part of the chapter on Objectivity. Following Hegel in assuming a foundational function of his Logic for the development of the categorical distinctions in his Philosophy of Nature, this ‘mismatch’ between logic and philosophy of nature inevitably leads to the following two questions: what are the reasons for Hegel to treat the notion of life differently in his Logic when compared with its treatment in the Philosophy of Nature? And further: what is the ‘best’ or most convincing ‘logical place’ for a possible chapter on ‘life’ in a program like the Hegelian logic?

I will argue, first, that Hegel in fact discusses two separate notions of life: one more ‘materialist’ or ‘biological’ version, and one more traditional notion of life. Second, given this distinction it will be shown that it would be more fitting for Hegel’s aim of ‘demonstrating the philosophical necessity of the logical notions employed in the Philosophy of Nature’ (*Enc.* §246, 9: 15; §246Z, 9: 20)⁷ to discuss the logic of ‘finite’ or ‘material’ life in the chapter on objectivity, while discussing the ‘Idea of Life’ (or the notion of an ‘absolute life’) at the place where Hegel does address such a notion, but then better without Hegel’s references to clearly biological themes. Such a reversal of the order in the Logic would be helpful for at least three reasons. It would strengthen Hegel’s claim that the philosophy of nature is based upon the ordering of concepts in the chapter on ‘Objectivity’, thus increasing the coherence between the Logic and the Philosophy of Nature. It would further avoid the oddity within the Logic of introducing the notion of external teleology before the notion of inner teleology. This in turn would help us to differentiate more precisely between the notions of ‘life’ and ‘spirit’, or ‘material life’ and ‘logical life’ in Hegel’s philosophy in a way that will be fruitful for further discussions of Hegel’s different usages of the notion of ‘life’ in his philosophy.

II. The relation between Hegel’s Logic and his Philosophy of Nature

This essay will investigate the chapter on teleology in the Logic by taking the Philosophy of Nature, not the Logic, as a starting point. The motivation to ‘reverse’ the perspective—looking at the Logic from the vantage point of Hegel’s

Philosophy of Nature, instead of following with Hegel the ‘pure logical self-movement of the Concept’ (*WL*: 5: 17, 5: 50)⁸—is based on Hegel’s understanding of the task of his Philosophy of Nature.

Hegel asserts that philosophy of nature is a genuinely philosophical, and therefore separate enterprise from the empirical natural sciences. Hegel describes ‘empirical physics’ and ‘philosophy of nature’ both as ‘thinking cognitions of nature’ (*Enc*: 9: 11–13; *VN*: 1–13).⁹ Science, like all human activities, is dependent upon thinking, and thus makes use of logical determinations of thought. Therefore, we can always find an implicit ‘metaphysics’ in any scientific theory:

This metaphysics in natural science is therefore a fact, and it cannot be otherwise, for it is man who relates to nature, and it is essential for man to think. His intuitions are necessarily permeated by thoughts. (*VN*: 3)¹⁰

From Hegel’s perspective, science employs an empirical method that is based upon a hidden ‘metaphysics of rationality’—an implicit understanding of concepts like cause, law, identity, difference, etc.¹¹—that is employed in the search for the universal order and law-like ‘inner side’ of nature. In this way, science unveils—to a degree—the inner logic that underlies nature.¹² Without getting deeper into Hegel’s appreciation and criticism of this ‘metaphysics’ that underlies science, the crucial point for our question is that the scientific ‘instinct of reason’ is in so far justified according to Hegel as nature truly has an ‘inner logical side’ that is partly unveiled by science, but that also needs to be further interpreted by philosophy.¹³

To be more precise: Nature as such is in a decisive sense surely nothing ‘logical’ for Hegel. Hegel is not a Berkeleyan idealist. Nature is neither ‘consciousness’, nor ‘spirit’, nor ‘intelligence’. By being spatial, temporal and finite—Hegel uses the term ‘externality’ (*Außerlichkeit*)¹⁴ to describe these basic properties of natural existence—nature is *essentially* different from the logical determinations of thought that are discussed in Hegel’s *Logic*, and from ‘spirit’ as discussed in his philosophy of spirit. But nevertheless, both the success of science as well as true thoughts about nature are possible precisely because there is an underlying logic in nature after all.¹⁵

Hegel captures this ambivalence of nature as being both ‘non-logical’, but at the same time having an underlying intelligible order, in his dictum that nature is the ‘Idea in the form of *otherness*’ (Idee in der Form des *Andersseins*).¹⁶ If this assertion is supposed to have any precise meaning then whatever we learn about ‘the Idea’ in Hegel’s *Logic* therefore has got to have decisive consequences for Hegel’s understanding of nature. Hegel even defines at one point the task of his Philosophy of Nature as ‘finding the Idea’, the ‘realized Concept’ in nature: ‘The determination and purpose of philosophy of nature is therefore that spirit should

find its own essence, i.e. the Concept in nature, its counterpart in it' (*Enc.* §246Z, 9: 23).¹⁷

In a modest understanding then, this means that we need to be able to show with Hegel that the dialectical development of certain given notions of the *Begriffslogik* actually helps us to gain important insight into aspects of nature. In other words, the empirical reality itself has to *correspond* to these notions as they are developed based on purely logical grounds in the Logic, as Hegel puts it.¹⁸ But in fact Hegel claims more, namely that his philosophy of nature has to relate the results of natural sciences to the *inner necessity of the order of concepts* that we arrive at if we take a purely logical stance. If nature is 'the Idea in its otherness' then Hegel must be able to demonstrate at least a certain plausible correspondence between the 'universal order' of nature as discovered in natural science and discussed in his Philosophy of Nature on the one hand, and the 'immanent and necessary' development of the self-determination of the highest notion in the Logic, the Concept, on the other hand (*Enc.* §246, 9: 15).

Therefore, if we want to study Hegel's Philosophy of Nature, we are told by Hegel that the 'philosophical necessity' of the notions that are employed by him to describe natural phenomena are not just a result of empirical investigations, but a result of dialectical conceptual explications. Accordingly, the task of philosophy is to develop a logical foundation for the most fundamental notions that we employ when we reconstruct our grasp of the structure of reality.¹⁹ To philosophically understand a part of nature (or culture) thus means to grasp the 'philosophical necessity' of the underlying defining notions of that aspect of reality in and for the process of the self-realization of the Absolute Idea (*Enc.* §§381–82, 10: 17–26).²⁰ One important consequence of this philosophical stance is Hegel's own attempt to correlate the philosophical understanding of natural and cultural phenomena with the corresponding dialectical unfolding of logical notions.²¹ Hegel thus in his Philosophy of Nature implicitly and explicitly makes the order of the chapters of his Philosophy of Nature parallel to the order of the logical development in the chapter on 'Objectivity': 'If the first part of philosophy of nature was Mechanism, and the second, at its apex, Chemism, this third [organic] part is Teleology' (*Enc.* §377Z, 9: 339).²² If we investigate this parallelism that Hegel draws here, we will see below that it makes perfect sense from a Hegelian perspective to look at organic life in this way. In fact, to do so is, as we will argue, one of the biggest strengths and most convincing aspects of Hegel's philosophy of biology. However, if we want to be precise, we also have to admit that this stated parallelism does, in fact, *not* actually match the way in which Hegel enfoldes the more detailed discussion of these logical determinations in his Logic.²³ Against Hegel's explicitly stated parallelism, there is in fact a mismatch between his Logic and his Philosophy of Nature.

III. A ‘mismatch’ in the correlations between the Logic and the Philosophy of Nature?

In his Philosophy of Nature Hegel characterizes life (*Leben*) as the ‘existing Idea’ (*Enc.* §337, 9: 337: ‘Hereby the Idea came into existence’ (‘Die Idee ist hiermit zur Existenz gekommen’)) while the Idea itself is characterized in the Logic as the ‘Unity of Concept and Reality’ or as the ‘Unity of Subjectivity and Objectivity’.²⁴ If we want to understand Hegel’s interpretation of life in nature, we are therefore required to study the *Logik des Begriffs*. But where exactly should we find the logical notions and categories that are foundational for Hegel’s philosophy of biology?

It seems obvious to point to the chapter called ‘Life’ in Hegel’s Logic, i.e. the first part of the section about ‘the Idea’ (see *WL*: 6: 469–87). The subdivisions of this part match precisely with the structure of Hegel’s analysis of organic life in his ‘Organics’.²⁵ But we can also easily notice that the preceding chapter in the Logic (called ‘Objectivity’, *WL*: 6: 402–61) closely corresponds to the structure of the Philosophy of Nature as a whole: the first sub-chapter ‘Mechanism’ corresponds to the part called ‘Mechanics’ of the Philosophy of Nature, ‘Chemism’ is the culmination point of the section called ‘Physics of Individuality’, and surely for Hegel organic life is characterized by *teleology*. We have just seen that Hegel himself claims that the main divisions in his Philosophy of Nature do in fact correspond to the ‘Objectivity’ chapter in his Logic.²⁶ But what are we then to make of the ‘extra’ chapter on the ‘Idea of Life’? In other words: how do we interpret these overlapping correspondences? Are there *two* chapters of the Logic that Hegel draws from in his Organics, one called ‘Teleology’ and another one called ‘Life’?

A closer look tells us that the teleology that is discussed in the Logic is primarily *external teleology*, while Hegel tells us explicitly in his Philosophy of Nature that life is characterized by *inner teleology*:

Since the concept is immanent in it, the *purposiveness* of life has to be understood as internal. [...] This objectivity of life is an *organism*, it is the *means* and *tool* of the end, perfectly purposive, since the concept constitutes its substance: but for this very reason this means and tool itself is the end that has been carried out, in which the subjective end is insofar directly united with itself. (*Enc.* §362Z, 9: 476)²⁷

If we assume—following Hegel’s own hint—a linear correspondence between the Philosophy of Nature and the Logic, then this leads us to the obvious question why the chapter called ‘Life’ in the Logic is not the last subchapter of ‘Objectivity’. In other words, why do we instead find here something else, namely a treatment of

primarily extrinsic teleological relations? The order in the Logic seems reversed, at least at first glance, when we look at it from the perspective of Hegel's *Realphilosophie*. What are we to make of this quite striking 'mismatch' between the development of concepts in Hegel's Logic as opposed to their application or appearance in the *Realphilosophie*? What are the consequences of this reversal of order, both for the chapter on teleology in the Logic and for the understanding of organisms in his Organics?

To approach an answer to these questions I will, first, shortly sketch the philosophical notion of organicity that is central to Hegel's Organics. I will then, second, compare and contrast this notion of organic life with what is said in the chapters on 'Teleology' and 'Life' in the Logic respectively. This will lead us to tentatively argue for structural changes in Hegel's philosophy that might help to solve the discussed problems and be advantageous for an actualization of Hegel's philosophy of biology.

IV. Life as a dialectical synthesis of nature

Hegel conceptualizes organic life as a form of existence that unites two opposing 'modes of being' whose logical conceptualizations are discussed in his chapters on Mechanism and Chemism.²⁸

A mechanical object—for example a stone or a planet—is characterized by a set of changing external relations that it can go through without *changing its essential identity*.²⁹ A moving stone is just as much, and not more or less of a stone than a stone at rest; a hot one not more than a cool one, etc. Qualitative identity of a mechanical entity is therefore compatible with certain kinds of non-essential changes, just as long as the stability of its self-identity is not threatened:

This constitutes the character of the mechanism, that whatever relationship takes place between the connected entities, that this relationship is *alien* to them, it has nothing to do with their nature and [the mechanical unity] remains nothing more than *composition, mixture, heap*, etc. (*WL*: 6: 409–10)³⁰

According to Hegel, 'mechanical physics' looks therefore at external changes to otherwise self-identical objects (*Enc.* §253, 9: 41; *WL*: 6: 408–10). In a chemical process, however, an object or element radically changes its quality, and thereby its essential identity. It might even get completely dissolved. We then speak of a new and different *kind* of element as the outcome of a chemical transformation (*Enc.* §336, 9: 334–36; *WL*: 6: 429–31). The product is essentially (i.e. qualitatively) not the same as the educt. '[T]he *beginning* and the *end* of the [chemical] process are different from each other; this is what constitutes its finitude, which distinguishes

and separates it from life' (*Enc.* §225, 9: 333).³¹ We observe changing transformations without preservation of identity on the level of the interacting substances.

Mechanism, the dominance of *self-stability without inner change*, and Chemism, the *dominance of change without self-identity*, are the two opposing notions that are juxtaposed in the chapters of Mechanism and Chemism in the *Logic* as well as in corresponding passages of Hegel's *Philosophy of Nature*.³²

In Hegel's analysis of Mechanism and Chemism we can further find a dominance of 'external causality' (*WL*: 6: 408, 6: 419, 6: 423, 6: 429, 6: 434f.). Dynamic mechanical processes are determined by a balance of forces that are conserved. This conservation or balance is, however, not itself existing as another thing or mechanical object, but it is the mere *inner* law that unites the system.³³ The prevailing mode of mechanical causality is *external causality*. Even though the inner quality of the chemical objects is deeply relevant for the resulting chemical process in a way that the quality of the mechanical object is not, the causality is still linear and thus external. As we said, the product is something other than the educt. The chemical process is not 'self-determined' or 'starting itself' (*WL*: 6: 432).³⁴ We speak of a chemical 'reaction', not of an action (*WL*: 6: 431; *Enc.* §335Z, 9: 333).

The organism now *unites* these two opposed modes of being, and is emphatically celebrated by Hegel as a 'dialectical existence'.³⁵ 'The fact that both determinations [rest and change] are unified in one, does not come into existence [in inorganic nature]; this unity as existing is the determination of life' (*Enc.* §336Z, 9: 334).³⁶ In other words, life is metabolism, *it stays the same* (i.e. keeps being the same living organism) *precisely because and only as long as it fundamentally changes itself* (*WL*: 6: 479, 467f., 472–75; *Enc.* 9: 480).³⁷ The process of *self-transformation* is essential for this type of *self-identity*. Life can thus neither be described 'chemically' in Hegel's sense, i.e. as a change without inner preserved self-identity, nor 'mechanically', i.e. as a self-identity without necessary inner change. Therefore, life has an inner identity that is neither identical with any given momentary embodiment (since this matter will be exchanged), nor can this inner identity be found 'outside' of the living organism.³⁸ An organism is not a mere object, it is a *Self*, it embodies the structure of self-affirming and self-creating subjectivity.³⁹

For Hegel, we have reached the highest dialectical synthesis that nature can achieve, because the *very two opposing determinations of nature itself, externality and interiority* (*Äußerlichkeit* and *Insichsein*), are now truly united—while all other stages of nature before life are only incomplete and one-sided 'unifications', unifications under the dominance of *externality*. True 'interiority', 'subjectivity' was never before realized as an object.⁴⁰ Therefore Hegel exclaims that in life the Idea, as we heard, is now *existing*.

Nevertheless, Hegel also tells us that this 'overcoming of nature' is itself yet taking place *within nature*, and that therefore two new and qualitatively different, yet even deeper forms of externality are connected with life. First, according to Hegel,

in life, a new dualism emerges between the generality of the species and the singularity of each individual living organism. The individual organism cannot embody the generality of the species, let alone of life as such. It is but one limited instantiation of the potential nature of the species (*WL*: 6: 485–86, and see *Enc*: §§367–76, 9: 498–537).⁴¹ Second, living organisms are confronted with an environment that is external to them: the organism truly is a ‘centre’ in a world, but a fragile one.⁴² Environment can be food and nutrition, but it can also be dangerous and deadly. Furthermore, living organisms are challenged by other living organisms that can be both helpful members of their own species or mortal enemies. Interest, pleasure and pain, help and harm, categories of the *life of subjectivity*—different from mechanical and chemical relations because of their *teleological* aspects—enter the world stage. These processes belong to the logic of external teleology. Life itself has the intrinsic goal of self-affirmation that goes along with a Hegelian understanding of subjectivity. But because of this inner goal otherwise neutrally existing external circumstances are measured as ‘good or bad’, i.e. as threat or promise for the organism. Organic irritability and sensitivity are essentially *evaluative* (*Enc*. §351Z, 9: 432).⁴³ The gap between the ‘centric’ nature of the organism and the otherwise indifferent externality of other objects and organisms remains a challenge, even a threat for the organism, as an existing ‘end in nature’.

The ‘process of nutrition and perception’ (assimilation) aims at overcoming the first form of this new externality, while the ‘process of the species’ aims at overcoming the second one (*WL*: 6: 480–86; *Enc*. §§361–67, 9: 473–98, §369, 9: 516–20). Both eventually fall short for Hegel; the individual organism is mortal. Hegel tells us that the individual has to die and is finite just because it does not reach ‘true lasting universality’ in the process of replication, but it produces yet only *another* single individual that remains a *different* individual.⁴⁴ Universality and particularity cannot be synthesized in nature. Therefore, for Hegel, the true first overcoming of this new deeper externality can only be found in mind. Mind is characterized by that form of true inner universality that is void of such an absolute external difference or opposition. The mind, especially the human mind, but also mind in its finite form as ‘soul’, therefore is no longer a part of nature, but belongs to a different order.⁴⁵

Let us now use this very brief sketch of Hegel’s understanding of organic life in his *Philosophy of Nature*⁴⁶ and compare it to the corresponding chapters of the *Logic* in order to shed some more light on the mismatch that we have discussed before.

V. The externality of the chapter on teleology in Hegel’s Logic

The chapter on teleology is predominantly concerned with the external relationship between an end and a mean whose inner connection is essential, but whose

inner identity only ‘becomes manifest’ at the end, in the ‘*realized purpose*’. Only at the end do we find a balance between inner purpose and outer reality, or between Concept and Reality, Subjectivity and Objectivity (*WL*: 6: 451).⁴⁷ Hegel uses the reflections about teleology, as we said, to constitute a transition from his chapter on Objectivity to the chapter called ‘Idea’ (with its first subsection on ‘Life’). We have just seen, however, how within the *Organic* the causal structure and inner self-identity of organic life was conceptualized as a synthesis of Mechanism and Chemism. Therefore, one would expect to see a corresponding logical reflection to be positioned here at the end of the chapter on Objectivity. To be sure, Hegel refers explicitly to organisms at this point and proclaims that *teleology as such*—whether it is internal or external—is the synthesis that is needed at the end of the chapter on Objectivity.⁴⁸ Fair enough, but why, again, is the notion of *external teleology* introduced *before* the *internal* one? Why is internal purposiveness a determining feature of organic life in nature, but only an outcome of ‘external teleology’ in Objectivity?

Looking carefully at the logical development that Hegel presents, it is difficult not to interpret the introduction of the logical equivalent of an intentional agent—i.e. a ‘subjective end’ that relates to objects externally via means—at this point in the *Logic* as a logical blueprint for ‘organicity’ (*WL*: 6: 445).⁴⁹ In order for us to speak about external teleology, some kind of purpose must be set or given in the first place. The chapter is spelled out in metaphors that are clearly reminiscent of intentional external teleological activity.⁵⁰ In order to make sense of this, an agent, a goal-setter is needed, and must be logically constituted. And naturally, one can read the end of the chapter on Chemism precisely in this way. Already here, Hegel argues, that the ‘self-determination’ of the Concept that was lost in the ‘externality of the objectivity’ is regained (*WL*: 6: 426).⁵¹ The argument runs shortly sketched like this: if we unite the two steps of Chemism that Hegel analyses, we arrive at a structure that overcomes the externality of Chemism: a process that constitutes and sustains its own identity (*WL*: 6: 434–36). The first process of Chemism is based on the given differential tension between the seemingly independent chemical agents. This process culminates in a ‘neutral’ outcome, thereby ending the chemical process (*WL*: 6: 431). Chemical agents can react because of their inner relations, and they do so, as soon as they are no longer ‘externally’ or ‘forcefully’ separated (*WL*: 6: 429). Hegel thus states that the chemical object entails a ‘contradiction’ between the seemingly independent existence and the true inner relatedness to each other. The chemical process allows this inner relatedness—this ‘inner truth’ of the chemical object—to manifest itself: the inner unity is ‘made explicit’ and comes into existence, however, only in the mode of ‘externality’ (*WL*: 6: 432), namely as another separated ‘neutral educt’. The second chemical process that Hegel analyses is the ‘diremption’ of a neutral chemical object into the ‘chemical basis’ and the ‘energetic’ process. This is the beginning of a self-

movement that starts from within the chemical agents and results for Hegel in the presupposed preconditions of the first process (*WL*: 6: 432–33).⁵² But both steps, the overcoming of chemical differences in a neutralizing process, and the unfolding of these differences out of the unity of a chemical element, are not yet united in Chemism. Taking these steps together will—conceptually speaking—constitute ‘life’.⁵³ Hegel writes:

The concept, which has hereby sublated all aspects of its objective existence as external and positioned them in its own simple unity, is thereby completely freed from objective externality, to which it refers only as its inessential reality; this objectively free concept is *the purpose*. (*WL*: 6: 436)⁵⁴

This result of Chemism would thus precisely be the notion of an *existing ‘individual’* in objectivity, a *Subject-Object*, or the ‘concept as existing in objectivity’. In fact, Hegel claims that the ‘subjective end’ that he introduces at this point *is* the notion that is needed to discuss the relationships of external teleology. Hegel states that in the ‘subjective end’ the ‘concept has reached itself in objectivity’ (*WL*: 6: 446).⁵⁵ But it is difficult to distinguish this phrasing from the ‘realized end’ understood as the ‘Idea as the realized concept’ that will be introduced only later, namely as the *outcome* of the considerations on teleology. Hegel later calls the ‘subjective end’ retrospectively the only *ansichseiende* (being-in-itself) *identity* of concept and objectivity, and distinguishes this from the Idea as the *fürsichseiende* (being for itself) *identity* of concept and objectivity (*WL*: 6: 461). Any defence of Hegel’s order of categories in the Logic would need to carefully distinguish the ‘subjective end’ as the (almost?) realized Concept in Objectivity from the Idea as a (complete?) unity of Subjectivity and Objectivity. Suppose we claim that we can clearly distinguish these notions, we still then would have to decide whether we should understand our notion of organic life in accordance with the first kind or the second kind of identity.

In other words, on the one hand we do need a version of a ‘realized concept’ to start the reflections about teleological relations. On the other hand, Hegel introduces the notion of ‘life’—and therefore of subjective agency that can have ‘finite ends’ (*WL*: 6: 446) and ‘drives’—explicitly only later, by subsuming it under the logic of the *Idea*, instead of dealing with ‘life’ under the rubric of the concept-object relationship.

Why then does Hegel reverse the order that one would expect—coming from his Philosophy of Nature, and when following our shortly sketched analysis of the end of the logical chapter on Chemism—and deal with external teleology—with the introduction of a ‘subjective purpose’—*before* he speaks about the inner teleology of life? What could be Hegel’s reasons to ‘postpone’ the logical analysis of life—that would be, as we said, a goal-setting entity in an objectivity—and to

deal with it in the first chapter of the ‘Idea’, rather than in the last chapter of ‘Objectivity’?⁵⁶

One could suggest that the main reason for this reversal is Hegel’s extraordinarily high evaluation of the peculiar structure of the organic unity of life.⁵⁷ It closely resembles, yes even embodies, his description of *absolute Subjectivity* which is the highest category of Hegel’s thinking as such. The Concept in the Logic was already in some explanatory comments associated with freedom, the I, and with life.⁵⁸ Accordingly, reflecting about life certainly played an important role for Hegel in his own development of his dialectical method. Furthermore, the strange purposive identity of life was certainly one of the riddles for any philosophy of nature during Hegel’s time.⁵⁹ Since Hegel conceives of objectivity as the *realm of externality per se*,⁶⁰ one might argue that the highest possible and truly dialectic unity of life is for Hegel, as it was for Kant, a sign of something that goes beyond mere objectivity, something *beyond* the realm of the mere mechanical Cartesian understanding of nature. Following the Kantian reservations against a mere mechanical explanation of the teleology of life,⁶¹ Hegel is able to explain, as we have just sketched, in what sense life is in fact in its mode of being truly too radically different from any other natural objects to be just subsumed among them. Against Kant, however, Hegel can show a convincing way how to logically transform the natural categories of Mechanism and Chemism and transition from their pure externality to the mode of being of life, thus overcoming the strict and rigid Kantian (ultimately Cartesian) dualism of either mere mechanical or else ‘ideal’ causation.⁶²

However, the mature Hegel is reluctant to ascribe to ‘nature’ itself the power of such a logical or dialectical self-transformation.⁶³ He explicitly regards his dialectic of concepts as a purely logical affair: self-determination and purpose, unfolding of conceptual implications (*Entwicklung*) seems to point to a realm or force that cannot be conceptualized in ‘natural terms’.⁶⁴ In the Logic, Hegel thus states that the inner essence of life lies *beyond* objectivity. It is therefore explicitly described as *immaterial*, and associated with the concept of the ‘soul’.⁶⁵ Accordingly, vitalist passages against chemical and mechanical reductions of organic phenomena, and a rejection of the idea of a natural evolution can be found in Hegel’s Philosophy of Nature more often than we might be comfortable with from a modern perspective.⁶⁶

To summarize, since one would expect *externality* to be dominant in the chapter of Objectivity, and fully realized ‘interiority’, ‘absolute unity’ to be a sign of the Idea, then *life, thus understood*, could not be a part, not even the last part, of the chapter on objectivity. Therefore, it seems that Hegel argues that mere *external teleology* has to come first, because it is something ‘lower’ than a truly *realized purpose*. The *coinciding* of mean and end, of inner subjective purpose and external objectivity, realizes a mode of being that stands higher than any product of blind natural mechanical or chemical forces. As a higher unity, life in the Logic signifies the status of

the ‘Bei sich sein’ of the Idea, or of a ‘realized concept’ that now has ‘*its own reality*’ and exists as its own objectivity.⁶⁷

In other words, in his *Philosophy of Nature*, life belongs to nature, in his *Logic*, life is associated with the Idea, and not with objectivity.⁶⁸ This leads to the question of how life should truly be understood. Is it the last synthesis of nature (and thus a part of objectivity, logically speaking), or is it the first part of the Idea? Hegel seems to fuse at this point in his *Logic* a more traditional ‘pure and glorified’ notion of ‘Life’ with which we are no longer necessarily familiar. This is a notion of Life (with a capital ‘L’) that goes far beyond the concept of biological material organicity, and is associated with the concept of the soul, absoluteness, and self-movement. This notion of Life has its own venerable philosophical history.⁶⁹ Following this tradition, organic life is one possible expression of a notion of life, the presence of embodied goal-directed purposive intelligence. This traditional, often metaphysical or religious ‘absolute’ Idea of eternal ‘Life’ aimed at describing the highest possible form of causality: a causality not only directed towards ‘subjective purpose’ (like survival in organic life, or like external teleology), but at ‘Goodness’ and ‘Truth’ (the highest notion of inner teleology) as opposed to the blind necessity that characterizes ‘mechanical’ or ‘external causality’. ‘Life’ in this pre-biological *highest* understanding was the notion of a causal structuring of reality according to perfection. Material organic life and Life are thus related as versions of purposive causality, but these notions are not understood to mean the same: organicity is an expression of, or a version of Life, but it is not Life.⁷⁰ It is, however, also possible to look at organicity merely as the most complex form of materiality in nature; a notion of life that started with the Cartesian notion of organic machines, and gained popularity after Hegel. This more materialistic notion of life (as ‘material organism’) has strongly influenced our contemporary modern biological notion of life.⁷¹ Which notion does Hegel aim at, or if he aims at both, how are they to be understood?

VI. Life in Hegel’s Logic, and the finitude of organic life in nature

Hegel takes pains in his *Logic* to argue that all three categories—Mechanism, Chemism and Life—are general *logical* categories, and not notions that only apply to the realm of nature. Otherwise, these categories would only belong to the *Philosophy of Nature*, and could not be a part of the *Logic*. They are therefore to be understood as having a general meaning, such that they can be used to describe logical, natural and mental processes.⁷² This leaves us with two possible interpretations of the deeper externality of organic life that we have discussed before.

We could conceive of this duality as a consequence of a merely ‘finite’ manifestation of an otherwise ‘absolute’ Idea whose first aspect or immediate form is

Life. The glorified Life *in itself*, logically understood, would then be the truly absolute unity of Subjectivity and Objectivity, the overcoming of all externality, an existence directed towards truth and goodness—the two other notions that characterize Hegel's Idea in addition to 'Life'—and it would be something *singular*: there are not *many* absolute Ideas in the Logic that compete or are in need of being synthesized.

Following this interpretation, the last chapter of the Logic, the ultimate synthesis, would then have to unfold this absolute unity without any true, let alone hostile externality—at this stage of the Idea there is nothing left 'outside' of this absolute unity. But it would still be possible to speak about a potential inner unfolding of the aspects of this absolute unity in itself and their relations. Following Hegelian patterns, this absolute Idea would have an immediate side, a reflexive side, and a self-mediated unity, now, however, all exclusively under the dominance of 'Bei-Sich-Sein'—so as not to *fall back* into what was defined as 'objectivity'. This, however, it seems to me, would be in fact the logical Idea of a *Soul*, or of *mind*.⁷³

Now, Hegel tells us that it is the logical notion of Life as such with its implications— independent whether it is the life of finite organisms or finite minds—that he wants to address here, and he does equate it with the notion of the soul, as we have just seen. In regard to such a pure 'logical' notion of Life—understood as the *immediacy of the absolute Idea in singular*—it could be said that the act of 'falling into finitude' (or freely transitioning itself into such externality) would be responsible for all externality of earthly life and human subjectivity. All these aspects would then belong to 'nature', but not to the 'pure Idea' itself.⁷⁴ This may be a convincing attempt to defend Hegel's notion of Life in the Logic, however, Hegel himself seems not to stick to this interpretation in his Logic for too long, at least as far as I can see. After seemingly arguing in this direction, Hegel then suggests a different possible interpretation of the externality that is connected to the Idea of Life, namely by understanding it as a consequence of the 'immediacy' of the Idea itself.

Hegel argues that because of this immediacy itself, Life first has to be understood as a *singular* individual. Surprisingly here, this singularity of the Idea, however, seems not to mean a Hegelian *Einzelheit*, as we would expect it from the Idea, but it clearly is spelled out as mere *Besonderheit*. This *logical* living individual is at once situated in an external objectivity, a realm of reality *that it is not yet identical with*, and that it only aims at 'sublating'.⁷⁵ The categories of this external relationship that are now unfolded are in fact based on external teleological relations between a 'Subject-Object' and its non-subjective reality (namely strikingly the 'process of *irritability*' and '*assimilation*') and between such a Subject-Object and another Subject-Object (the 'process of the species' (*WL*: 6: 480–87)). This makes sense in the philosophy of biology. But is it convincing to argue like this, given what Hegel is aiming at *here* at the end of the

Logic? In other words: does it make sense to introduce markedly finite, even temporal and material notions of irritability, sensitivity, even of suffering and death into the Logic of the absolute Idea?⁷⁶

There can be little doubt, I think, that these notions belong, in fact, logically speaking, to the chapter on externality, that is to the chapter on Objectivity. If the externality of teleological relations means that they must be banned from the perfect unity of the Idea, then also such a singular unity of Subjectivity and Objectivity *within* Objectivity—about which these sub-chapters of Life in the *Logic* speak—belongs to Objectivity.

To summarize: looking at both chapters (Teleology and Idea of Life), and given Hegel's explicit understanding of Objectivity on the one hand, and of the unity of the Idea in singular, it would be much more plausible to treat 'life' (as a 'living object') as the last part of Objectivity. Life would then truly be conceptualized as a synthesis of Mechanism and Chemism, an externally determined form of inner purposiveness within objectivity. From here, the external teleological relationships of such an entity could be unfolded, and then a transition to the chapter on the Idea could be made in an analogous way to Hegel's transition from his philosophy of biology to the Philosophy of Spirit. In other words, one is tempted to suggest that the Idea of Mind (or 'soul'), not life, is the 'Idea in its immediacy'. And this would at once offer a lot of fruitful philosophical insights, since a mind (or soul) cannot be conceptualized in the same way as a material or external physical object (including an organic body). The mind is not *in* the world as water is *in* a glass, maybe not even in the same way in which an organism is *in* its environment. Organs can be 'torn out' of an organism. They will cease to exist and function as organs, but they will be *physical-material* objects nonetheless. Thoughts, emotions and impressions cannot, however, be 'ripped out' of a mind. The relationship between mind and nature is therefore in no way conceptually or logically similar to that of organic bodies and food. Furthermore, 'objective life' as aiming at 'self-sustainment' has to be conceptually distinguished from the logical 'life of the mind' that potentially aims at 'knowing' and 'goodness'.⁷⁷ Mind may start in life, but the embodied aspects of life belong to Objectivity, or to 'nature' for that matter. These physical relations can and must be described with logical concepts that presuppose objective externality, and thus we can avoid Hegel's vitalist temptations in his Philosophy of Nature. The mind itself, however, it seems, cannot adequately be described in this way.

Accordingly, the main divisions in Hegel's Logic would correspond precisely to the main division of Hegel's *Realphilosophie*. The division between nature and mind would match the division between Objectivity and Idea. Only in mind, if ever, can nature be thought to be 'beyond itself' in a way that requires fundamentally new and different philosophical categories: 'For us, spirit has nature as its

presupposition, the *truth* of which and thus its *absolute first* it is. In this truth, nature has disappeared' (*Enc*: §381, 10: 17).

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Notes

¹ See Höhle (1988: 313f.). For Hegel's philosophy of nature in general see Kalenberg (1997), Spahn (2007), Wandschneider (2008). Recently Hegel's philosophy of biology has been discussed in Houlgate (1998), Stone (2005), Spahn (2007), Sell (2013), Furlotte (2018) and Ng (2020). For a recent overview of the prospects of Hegel's philosophy of biology, see Gambarotto and Illetterati (2020).

² In his *Lectures on the Philosophy of Nature* from 1821–22 (*VN*: 167) it is said: 'Life is essentially speculative and therefore it can only be grasped through an understanding of the Concept. For Rationality, life is a perfect contradiction'. Compare Hegel's remarks in his *Philosophy of Nature* in the *Encyclopaedia* (*Enc*: §337A, 9: 338): 'At the same time, life is the resolution of this contradiction, and therein consists its speculative character, while this contradiction remains unresolved only for rationality'. See also his *Logic* (*WL*: 6: 472).

³ Abbreviations used for Hegel's works:

D = Hegel, *Differenz des Fichteschen und Schellingschen Systems der Philosophie* (TWA 2).

Enc = *Enzyklopädie der philosophischen Wissenschaften* (TWA 8–10).

PbG = *Phänomenologie des Geistes* (TWA 3).

SF = *Systemfragment von 1800* (TWA 1).

TWA = *Werke in zwanzig Bänden. Auf der Grundlage der Werke von 1832–1845 neu edierte Ausgabe*, ed. E. Moldenhauer and K. M. Michel (Frankfurt: Suhrkamp, 1969).

VGPb = *Vorlesungen über die Geschichte der Philosophie* (TWA 18–20).

VN = *Vorlesung über Naturphilosophie Berlin 1821/22. Nachschrift von Boris von Uexküll*, ed. G. Marmasse and T. Posch (Frankfurt: Lang, 2002).

WL = *Wissenschaft der Logik* (TWA 5–6).

Abbreviations used for works by Kant:

AA = Kant, *Gesammelte Schriften*. Akademie Ausgabe (Berlin: de Gruyter, 1920ff.).

All English quotations are my own translations.

⁴ See esp. Spahn (2007).

⁵ See Spahn (2007: 213–60) and Wandschneider (2008: 26–30), (2015).

⁶ The chapter about ‘The Idea’ has a subchapter on ‘Life’. For brevity’s sake I will speak about ‘the Idea of Life’ (even though this is not precisely Hegel’s terminology) in order to distinguish the considerations about ‘life’ in the Logic from considerations about ‘Organic Life’ in Hegel’s Philosophy of Nature.

⁷ See the discussion below in section II.

⁸ I have extensively discussed the inner-logical development in the Objectivity chapter in Spahn (2007: 15–203).

⁹ ‘In fact, however, the first thing to be shown against empirical physics is that there are more thoughts in it than it admits and knows; that it is better than it thinks, or even, if thinking in physics counts as something bad, it should be considered worse than it thinks it is. Physics and natural philosophy do not differ from each other like perception and thinking, but instead they differ by *the kind and way of thinking*; they are both thinking cognitions of nature.’ (‘In der Tat aber ist das erste, was gegen die empirische Physik zu zeigen ist, daß in ihr vielmehr Gedanke ist, als sie zugibt und weiß, daß sie besser ist als sie meint, oder wenn etwa gar das Denken in der Physik für etwas Schlimmes gelten sollte, daß sie schlimmer ist, als sie meint. Physik und Naturphilosophie unterscheiden sich also nicht wie Wahrnehmung und Denken voneinander, sondern nur *durch die Art und Weise des Denkens*; sie sind beide denkende Erkenntnis der Natur.’) (*Enc*: 9: 11–13; *VN*: 1–13)

¹⁰ ‘Diese Metaphysik in der Naturwissenschaft ist also ein Faktum, und es kann nicht anders sein, denn es ist der Mensch, der sich zur Natur verhält, und dieser ist wesentlich denkend. Seine Vorstellungen sind notwendig durchzogen von Gedanken.’

¹¹ See already Hegel’s critical remarks about ‘Kraft und Verstand’ (*PbG*: 107–36), and about ‘Gesetze’ (*PbG*: 192–95).

¹² *Enc*: §246, 9: 15–20. The *Philosophy of Nature* has to find the ‘Inner side of this inner side’ (*Enc*: §246Z, 9: 22).

¹³ See esp. *Enc*: §246Z, 9: 20; §247Z, 9: 24–25. See recently Kabeshkin (2022b: 778–80) who uses Sellars’s distinction to convincingly argue that Hegel defends the ‘manifest image’ against the abstract ontology of scientism. He also points out that Hegel does not reject all metaphysics, but only the wrong kind of metaphysics (2022b: 781).

¹⁴ In this text I will follow Hegel and use the term ‘externality’ to allude to these notions of *Anderssein* (otherness) and *Außerlichkeit* (exteriority, externality) that are central for Hegel to capture all the ‘finitude’ that goes along with spatio-temporal and external causal relations in nature.

¹⁵ Nature is at first glance a ‘mystery’ and a ‘riddle’ for us, ‘spirit senses itself in it [in nature]; repulsed by something foreign in which it cannot find itself’ ([...] *der Geist ahnt sich darin; abgestoßen von einem Fremden, in welchem er sich nicht findet*) (*Enc*: 12). Hegel also alludes to Schelling’s dictum that nature is ‘petrified [or frozen] intelligence’ (*Enc*: §247Z, 9: 25). The claim that true objective thoughts about the inner universal order of nature are possible for us—in so far as there is a common logic within our thinking and within nature—is made explicit in *Enc*: §246Z, 9: 19: ‘This universality of the [natural] things is not something subjective that belongs to us [...] but rather [...] a noumen, the truth, objectivity, actuality of the things themselves, like the Platonic Ideas, which [...] exist as the substantial genera inside the individual

things’ (‘Dieses Allgemeine der Dinge ist nicht ein Subjektives, das uns zukäme [...] sondern vielmehr [...] ein Noumen, das Wahre, Objektive, Wirkliche der Dinge selbst, wie die Platonischen Ideen, die [...] als die substantiellen Gattungen in den einzelnen Dingen existieren’). See also *VN*: 7–9. Hegel stresses that ‘reason insists that the truth must be able to be known’ (‘Vernunft läßt es sich nicht nehmen, daß das Wahre zu erkennen sein müsse’) (*VN*: 5).

¹⁶ *Enc*: §247, 9: 24. See Spahn (2007: 116–22).

¹⁷ ‘Dies ist nun die Bestimmung und der Zweck der Naturphilosophie, daß der Geist sein eigenes Wesen, d.i. den Begriff in der Natur, sein Gegenbild in ihr finde.’

¹⁸ ‘[I]n addition to the fact that the object is to be specified according to its *conceptual determination* within the philosophical process, the *empirical* phenomenon that corresponds to it is to be named and it is to be shown [...] that it does in fact correspond to it’ ([...] außerdem, daß der Gegenstand nach seiner *Begriffsbestimmung* in dem philosophischen Gange anzugeben ist, [ist] noch weiter die *empirische* Erscheinung, welche derselben entspricht, namhaft zu machen und von ihr aufzuzeigen [...], daß sie jener in der Tat entspricht’) (*Enc*: §246A, 9: 15).

¹⁹ See Hegel (*Enc*: §246, 9: 15) about the ‘comprehending observation of nature’ (‘begreifende Naturbetrachtung’) that looks at the ‘*Universal*, but in its own right’ (‘*Allgemeine*, aber für sich’) and ‘considers it in its *own immanent necessity* for the self-determination of the Concept’ (‘und betrachtet es in seiner *eigenen, immanenten Notwendigkeit* nach der Selbstbestimmung des Begriffs’). Further see Hegel’s famous claim that philosophy has to understand ‘that and why’ there is a nature (*Enc*: 9: 10). For this issue see Houlgate (2002) and Spahn (2007: 112–16).

²⁰ See already Hegel’s conception of philosophical knowledge in *D*: 2: 30. See further *VN*: 20.

²¹ This obviously does not imply that there has to be a ‘precise’ or even ‘schematic’ parallelism between the Logic and the *Realphilosophie*. Hegel himself rightfully rejects the idea of a merely schematic philosophy of nature that superficially finds the same ‘absolute’ pattern everywhere, see *Enc*: 9: 9. Nevertheless, as we said, the notion that ‘nature is the Idea in its otherness’ must have meaningful consequences for Hegel’s Philosophy of Nature. A preeminent and detailed discussion concerning the challenges of the correspondences between logic and *Realphilosophie* throughout Hegel’s system as a whole can be found in Höhle (1988: 101–54).

²² ‘War der erste Teil der Naturphilosophie Mechanismus, der zweite in seiner Spitze Chemismus, so ist dies Dritte [das Organische] Teleologie.’ See accordingly *VN*: 161f.

²³ See Höhle (1988: 113).

²⁴ ‘The Idea, however, not only has the more general sense of *true being*, the unity of *concept and reality*, but the more specific sense as the unity of the *subjective concept and objectivity*’ (‘Die Idee hat aber nicht nur den allgemeineren Sinn des *wahrhaften Seins*, der Einheit von *Begriff* und *Realität*, sondern den bestimmteren von *subjektivem Begriffe* und der *Objektivität*’) (*WL*: 6: 466).

²⁵ This chapter is subdivided into ‘A. Living Individual, B. The process of Life, and C. the Species’ (*WL*: 6: 474–86), and it thus corresponds to the structure and themes of the *Organic* in Hegel’s *Philosophy of Nature*. The chapter on the ‘animal organism’ is structured accordingly: ‘a. Form, b. Assimilation, c. Process of the Species’, and the same structuring principle underlies the chapter on the ‘vegetative organism’, see *Enc*: §346, 9: 394; §352, 9: 435.

²⁶ See note 22 above.

²⁷ ‘Da in ihm der Begriff immanent ist, so ist die *Zweckmäßigkeit* des Lebens als innere zu fassen. [...] Diese Objektivität des Lebendigen ist *Organismus*, sie ist das *Mittel* und *Werkzeug* des Zwecks, vollkommen zweckmäßig, da der Begriff ihre Substanz ausmacht: aber eben deswegen ist dies Mittel und Werkzeug selbst der ausgeführte Zweck, in welchem der subjektive Zweck insofern unmittelbar mit sich selbst zusammengeschlossen ist’. See accordingly *VGPb*: 20/87.

²⁸ Following Hegel’s quoted parallelization I draw in this summary both from Hegel’s remarks in the *Philosophy of Nature*, and from his more detailed analysis in the *Logic*. Recently see Kabeshkin (2022b), for an excellent discussion of the logical development in Hegel’s *Philosophy of Nature* concerning Mechanism and Physics, and Kabeshkin (2022a) for a comparison of the discussion of Life in the *Logic* and the *Philosophy of Nature*.

²⁹ In the following I will summarize Hegel’s complex analysis of ‘identity’ that differentiates and integrates different notions of ‘identity’. As an object in nature—or in ‘externality’ (see note 14 above)—every mechanical, chemical, biological object i) has a ‘numerical identity’ just by being an individual object, ii) it also has a ‘formal’ identity as the type of object that it is (i.e. what ‘natural kind’ it belongs to, see for example for ‘chemical objects’ (*WL*: 6: 429)), iii) Hegel further analyses the relationship of an object’s ‘processes and relations’ in their importance and relevance for the question how an object can ‘stay the same’ kind of object during changes: a colour of a mechanical object does not influence his movements. Gravity and cohesion, however, are important for a mechanical object to continue to exist. This may be called the ‘qualitative identity’: what something is and how it stays the same under certain kinds of changes. In the following I will use the notion ‘self-identity’ to refer to this ‘essential identity’ understood as the ‘qualitative identity’ of changeable objects by which they can remain the same type of objects. It is mainly this relationship between ‘what kind of object something is’ and ‘how it can continue to exist as such an object’ that is relevant for the following analysis.

³⁰ ‘Dies macht den Charakter des *Mechanismus* aus, daß, welche Beziehung zwischen den Verbundenen stattfindet, diese Beziehung ihnen eine *fremde* ist, welche ihre Natur nichts angeht und, [die mechanische Einheit, C.S.] nichts weiter als *Zusammensetzung, Vermischung, Haufen*, usf. bleibt’. See also *Enc*: §194Z2, 8/352. Mechanism in Hegel’s *Philosophy of Nature* thus basically concerns spatiotemporal changes of otherwise self-identical objects.

³¹ ‘[D]er *Anfang* und das *Ende* des [chemischen, C.S.] Prozesses sind voneinander verschieden; dies macht seine Endlichkeit aus, welche ihm vom Leben abhält und unterscheidet’.

³² For a more detailed analysis, see Spahn (2007: 156–76).

³³ See *WL*: 6: 408: ‘*At first*, objectivity is in its immediacy, the moments of which, for the sake of the totality of all moments, exist in independent indifference as *objects apart from one another* and that only have in their relationships the *subjective unity* of the concept as *internal* or *external*—the mechanism’ (‘*Fürs erste* nun ist die Objektivität in ihrer Unmittelbarkeit, deren Momente um der Totalität aller Momente willen in selbständiger Gleichgültigkeit als Objekte *außereinander* bestehen und in ihrem Verhältnisse die *subjektive Einheit* des Begriffs nur als *innere* oder *äußere* haben,—der Mechanismus’). Compare the similar reflection to the inner law of nature in *PbG*: 120–36. A recent intriguing reconstruction of Hegel’s critique of merely mechanical explanations can be found in Kreines (2004: 38–74).

³⁴ ‘The process does not restart by itself’ (‘Der Prozeß facht sich nicht von selbst wieder an [...]’).

³⁵ See note 2 above, and see for life as ‘the truth’ (*das Wahre*) in nature *Enc.* §337Z, 9: 338f.

³⁶ ‘Daß beide Bestimmungen [Ruhe und Veränderung, C.S.] in einem zumal sind, kommt [in der anorganischen Natur, C.S.] nicht zur Existenz; diese Einheit als existierend ist die Bestimmung des Lebens [...]’

³⁷ See also *VN*: 167: ‘Life sustains itself; from this definition [...] one can derive the general concept of life’ (‘Das Leben erhält sich selbst; man kann von dieser Bestimmung [...], den Begriff des Lebens überhaupt ableiten’).

³⁸ For a reconstruction of Hegel’s argumentation from the perspective of biological system theory see Wandschneider (1987; 2008: 144–63). Recently see Thompson’s fascinating philosophical interpretation of the structure of life (2007) that draws from Kant (whose philosophy of biology influenced Hegel), Merleau-Ponty (who was influenced by Hegel) and Hans Jonas. For a comparison of Thompson’s and Hegel’s view see Spahn (2011), and for a detailed reconstruction of Hegel’s philosophy of biology from a modern perspective Spahn (2007: 227–75).

³⁹ Hegel takes up the term ‘Subject-Object’ in order to describe the *Idea*, and characterizes it as the ‘concept freed to its subjectivity’ from its ‘immersion [Versunkenheit] in objectivity’ (*WL*: 6: 466). For a philosophical reconstruction of the selfhood and agency of organic beings from the perspective of the autopoiesis theory see Thompson (2007: 149–62).

⁴⁰ Hegel ascribes ‘Individuality’, but not ‘Subjectivity’ to the centre of the mechanical systems, see *Enc.* §337Z, 9: 339.

⁴¹ Hegel connects this thought with the inner mortality of the organism (*Enc.* §375, 9: 535–37).

⁴² Hegel writes in regard to animals and humans: ‘The external contingency of the environment contains almost nothing but alien things; it exerts a constant violence and threat of danger upon his feeling, which is an *insecure, fearful, unhappy* one’ (‘Die Umgebung der äußerlichen Zufälligkeit enthält fast nur Fremdartiges; sie übt eine fortdauernde Gewaltsamkeit und Drohung von Gefahren auf sein Gefühl aus, das ein *unsicheres, angstvolles, unglückliches* ist’) (*Enc.* §368A, 9: 502).

⁴³ For an interpretation from a modern perspective see Spahn (2007: 248–52) and Wandschneider (2008: 151–53). The evaluative nature of the senses in the process of ‘sense-making’ is excellently described in Thompson (2007: 152–54).

⁴⁴ ‘Its [the animal’s] inappropriateness to the universality is its *original disease* and the innate germ of death. The sublation of this inappropriateness is in itself the accomplishment of that fate’ (‘Seine [des Tieres] Unangemessenheit zur Allgemeinheit ist seine *ursprüngliche Krankheit* und der angeborene Keim des Todes. Das Aufheben dieser Unangemessenheit ist selbst das Vollstrecken dieses Schicksals’) (*WL*: 6: 486; *Enc.* §374, 9: 535).

⁴⁵ *Enc.* §381, 10: 17; §389, 10: 43. The mind that is ‘not yet spirit’ (*Geist*) is here called ‘the soul’ and its immateriality and difference from ‘nature’ is emphasized (*Enc.* §389, 10: 43f). See also the concept of the ‘immateriality’ of life: the *Idea* in its immediacy as life is characterized as being ‘simple’ and ‘immaterial’ (*WL*: 6: 467).

⁴⁶ As has been said before, with Hegel we have been referring to the ‘logic’ of Mechanism and Chemism that is both unfolded in his Logic and ‘applied’ in his Philosophy of Nature.

⁴⁷ See especially *WL*: 6: 458, where Hegel claims that ‘intrinsic purposiveness’ is the ‘result’ and ‘truth’ of the process of external teleology that was discussed before. This implies that teleology as discussed so far by Hegel was an external relation between a merely ‘subjective end’ and a merely ‘objective means’. With the conception of an inner end this ‘externality’ is overcome. This unity is called ‘the Idea’ (*WL*: 6: 461).

⁴⁸ See *WL*: 6: 440, where Hegel praises Kant’s understanding of intrinsic purposiveness as more adequate than any only ‘externalistic’ understanding of teleology. Here Hegel separates, on the one hand, Mechanism and Chemism from Teleology. Mechanism and Chemism *together* are subsumed under ‘natural necessity’ (*Naturnotwendigkeit*) and opposed to the ‘freedom’ of the concept in Teleology (*WL*: 6: 438). On the other hand, the ‘subjective purpose’ at the beginning of the chapter on teleology is regarded as being ‘external’ to the objectivity and the means (see the summarizing remarks in *WL*: 6: 460). The category of intrinsic purposiveness thus is only introduced at the end of the chapter.

⁴⁹ The transition to the ‘subjective end’ is made by removing the ‘externality’ of the chemical process, by bringing together, as we said, the ‘self-standing’ character of mechanical objects, and the qualitative determination and change of the chemical process. It is difficult to read the passage on the ‘subjective end’ (*WL*: 6: 445f) without thinking about the organism.

⁵⁰ The ‘subjective end’ is characterized by a ‘drive’ (*Trieb*) and an ‘aiming’ (*Streben*) to ‘externalize’ or ‘realize’ itself (*sich äußerlich zu setzen*) (*WL*: 6: 445). Drive (*Trieb*) is the German word that is used to characterize living nature, or aiming awareness. Hegel contrasts such a ‘drive’ from the relationship of cause and (external) effect, and from the relation between substance and accidents (*WL*: 6: 445). Hegel however also uses the term ‘Trieb’ for the activity of the Idea as ‘end in itself’, see *WL*: 6: 446.

⁵¹ See my analysis in (2007: 150–64).

⁵² We can compare this argumentation to the prior movement from inert matter that ‘gets externally moved’ to the notion of ‘gravity’ as an essential inner aspect of matter, see the instructive interpretation from Kabeshkin (2022b: 781–86).

⁵³ Kabeshkin accurately reconstructs Hegel’s logical notion of life accordingly as essentially characterized by a unity of the ‘drive for differentiation and the drive for unification’ or ‘integration’, see (2022a: 132–33).

⁵⁴ ‘Der Begriff, welcher hiermit alle Momente seines objektiven Daseins als äußerliche aufgehoben und in seine einfache Einheit gesetzt hat, ist dadurch von der objektiven Äußerlichkeit vollständig befreit, auf welche er sich nur als seine unwesentliche Realität bezieht; dieser objektive freie Begriff ist der *Zweck*.’

⁵⁵ ‘Der Zweck ist nämlich der an der Objektivität zu sich selbst gekommene Begriff’.

⁵⁶ This reversal is equivalent to the way that Hegel treats life and organism in the *Phenomenology of Spirit*. ‘Life’ is not dealt with in the chapter on ‘Bewußtsein’, that treats ‘mechanical nature’ all the way up to the conception of laws and forces in nature (*PbG*: 3: 107–36). Instead, organic life is discussed after the notions of *Selbstbewußtsein* and *Vernunft* are introduced. Already here Hegel claims that only reason (*Vernunft*), not rationality (*Verstand*) can fully understand ‘organicity’ (see *PbG*: 3: 224f). For this question see Spahn (2007: 125–28).

⁵⁷ See Spahn (2007: 164–75).

⁵⁸ ‘Life, or organic nature, is that stage of nature at which the concept emerges; but as a blind concept that does not understand itself, i.e. not as thinking concept’ (‘Das Leben, oder die organische Natur ist diese Stufe der Natur, auf welcher der Begriff hervortritt; aber als blinder, sich selbst nicht fassender, d.h. nicht denkender Begriff’) (WL: 6: 257). See further for the association of *Begriff* and *Leben* WL: 6: 279.

⁵⁹ In the *Fragment of a System* we can read that life is the ‘Verbindung der Verbindung und der Nichtverbindung’ (SF: 1: 422) which of course resembles Hegel’s later description of the Absolute as the *Identity of Identity and Non-Identity* (see WL: 5: 74).

⁶⁰ Hegel conceives of objectivity as such as the ‘anundfürsichseiende Sein des Begriffs’—the being-for-and-in-itself of the concept and therefore distinguishes objectivity from Sein (Being) and Dasein (Determined Being), see WL: 6: 408. However, the objectivity ‘is in its immediacy the self-standing indifference of objects existing *apart from each other*’—such that the concept is at first only the ‘inner or external truth of the objectivity’ (WL: 6: 409). See also WL: 6: 460 for the characterization of the realm of objectivity as ‘indifferent externality’ (*gleichgültige Äußerlichkeit*). The concept has to ‘realize’ itself in its own objectivity by overcoming this externality. For this notion of ‘externality’ see the remarks about nature as ‘Idea in its otherness’ above.

⁶¹ See Kant, *Critique of Judgement*, AA: 5: 280–92. For Kant’s treatment of teleology see esp. Zammito 2007.

⁶² Following Cartesian dualism, Kant distinguishes mechanical ‘blind’ external causality from goal-directed causality based upon ‘purposes’. He at one point calls this an ‘ideal-causality’ (*Ideal-Kausalität*) because here the ‘idea of the whole’ causally influences the bringing forth of an object (as for example in acts of human *techne* or divine creation). Organic life is characterized by purposiveness, which lead some philosophers to the temptation to postulate (divine) intelligence as the only possible cause for organisms, a conclusion that Kant rejects, see Kant (AA: 5: 286–88). While Kant opts for an interpretation of purposive causality as a heuristic assumption, Hegel treats teleology as something far more objective. For a recent critical assessment of Kant’s ‘unstable middle position’, see Gambarotto (2017). For a comparison of Kant’s and Hegel’s treatments of teleology see Kreines (2015: 77–109) and Spahn (2020a). I cannot get here into the reasons why I prefer a non-Cartesian picture of nature, but see my discussion in (2011).

⁶³ This is in contrast to earlier, more romantic ideas of a natural metamorphosis that can be found for example in Schelling’s *Weltseele* and in Herder’s postulation of organic forces in nature (Herder 1784–91) against which Kant reacts (AA: 8: 43–66). A discussion of the ideas of German romantic philosophy of nature can be found in (Richards 2004). The mature Hegel seems to follow Kant by being more careful to introduce ‘ideal causation’ into nature, as argued in Spahn (2020b). Hegel reserves the notion of a ‘logical’ or ‘ideal’ development (*Entwicklung*) for the domain of spirit. Accordingly, Hegel is sceptical towards theories of natural evolution, see Wandschneider (2000) and Welsch (2008).

⁶⁴ ‘Nature is to be regarded as a *system of stages*, each one of which necessarily emerges from the other and is the nearest truth to that from which it results, but not so that one was *naturally* generated from the other, but in the inner Idea that constitutes the foundation of nature.

Metamorphosis only belongs to the concept as such, since only its transformation constitutes development' ('Die Natur ist als ein *System von Stufen* zu betrachten, deren eine aus der andern notwendig hervorgeht und die nächste Wahrheit derjenigen ist, aus welcher sie resultiert, aber nicht so daß die eine aus der andern *natürlich* erzeugt wurde, sondern in der inneren, den Grund der Natur ausmachenden Idee. Die *Metamorphose* kommt nur dem Begriff als solchem zu, da dessen Veränderung allein Entwicklung ist' (*Enc.* §249, 9: 31). For a recent interpretation of Hegel's claim that nature itself is (partly) shaped by 'indeterminacy' along the lines of Cartwright's interpretation of the laws of nature see Bowman (2013: 142–54).

⁶⁵ In *WL*: 6: 468 the Concept as the Idea is characterized as 'soul' (*Seele*). In the *Encyclopaedia* the 'soul' is explicitly treated after the *Philosophy of Nature*, in the first part of the *Philosophy of Spirit* (*Enc.* §389, 10: 43ff).

⁶⁶ See for example Hegel (*WL*: 6: 482; *Enc.* §354, 9: 439; §365Z, 9: 484). For the problem of vitalism from a Hegelian perspective see Spahn (2007: 173, 188f).

⁶⁷ Life is thus associated with self-movement and freedom. See for example *WL*: 6: 438, 6: 475.

⁶⁸ This coincides with the recent reading of the difference between the 'Idea of Life' and life in nature in Kabeshkin (2022a) who argues that this distinction allows Hegel to go beyond Kant's notion that everything in the natural organism has to be 'shaped by purpose'. For Hegel this would only be true for the 'logical life', but not for life in space and time.

⁶⁹ For a re-actualization of a logical notion of 'life', see especially Kabeshkin (2022a). I do believe with Kabeshkin that a notion of 'Life' belongs in fact to the *Logic*. Before our recent notion of life became 'biological', philosophers like Plato and Aristotle have argued that self-movement and self-determination as such constitute 'life' (so that 'organisms' are *one* version of life, but also stars and the cosmos seem to be alive in so far as they have self-movement). This concept is transferred notably by Augustin to God as the '*living* God'—a notion that is clearly not meant to denote something biologically, especially once it is applied to a transcendent being. Such a notion would justify or at least help us to understand Hegel's frequent talk of the 'life' of the Concept.

⁷⁰ Spahn (2007: 174–78). Still for Kant the notion of life (*Leben*) has to be distinguished from the notion of organicity (*Organismus*), as Ingensiep (2004: 128–30) correctly points out.

⁷¹ Toepfer (2011: 422–30).

⁷² Hegel does this by claiming that these concepts can be applied both in nature and in the realm of spirit: a government could act mechanically, love and affinity are 'chemical relations' in a logical sense, and we can speak of life in nature, but also of the life of the mind, yes even of the life of the Concept or the Idea (*WL*: 6: 410, 6: 425, 6: 429; *Enc.* §195Z, 8: 353f.; §198A, 8: 356).

⁷³ See the quoted passages about the 'soul' in notes 28 and 43. Even though Martin rejects the concerns about the chapter on objectivity that we have discussed here (Martin 2012: 321, 373), his interpretation of the Idea in its immediacy comes close to my suggestion to regard the *idea of the 'soul'*, not of organic life, as the first part of the chapter on the Idea, see Spahn (2007: 175–77) and Martin (2012: 43–451). His argument, following Hegel's intuitions, that 'self-determination' (against the externality of determination in objectivity) allows us to subsume *life* and spirit under

the same header, is something that I generally agree with, despite my concerns. I do still think, however, that it remains ontologically true that external teleology presupposes the notion of an agent in objectivity.

⁷⁴ This is what Hegel seems to be saying (*WL*: 6: 470–73) when he distinguishes the ‘pure Idea’ or the ‘logical Life’ from life in nature. Life in nature has to relate to external material and temporal conditions and depends on inorganic nature, but ‘Life’ in the Idea is without such conditions—the concept is here the ‘omnipresent soul’ in its own objectivity, see *WL*: 6: 472.

⁷⁵ ‘It [the immediate Life] is thus essentially something *singular*, which relates to objectivity as something else, an inanimate nature. The original *judgment* of life therefore consists in the fact that it separates itself as an individual subject from the objectivity and, in that it constitutes itself as the negative unity of the concept, makes the *presupposition* of an immediate objectivity’ (‘Es [das unmittelbare Leben, CS.] ist damit wesentlich *Einzelnes*, welches auf die Objektivität sich als auf ein Anderes, eine unlebendige Natur bezieht. Daß ursprüngliche *Urteil* des Lebens besteht daher darin, daß es sich als individuelles Subjekt gegen das Objektive abscheidet und, indem es sich als die negative Einheit des Begriffs konstituiert, die *Voraussetzung* einer unmittelbaren Objektivität macht’) (*WL*: 6: 473).

⁷⁶ Already at the end of his own lifetime Hegel was criticized for unwarrantedly introducing categories of the philosophy of nature into the *Logic*, for example by C. F. Bachmann in 1828, H. C. W. Sigwart in 1831, H. Ulrici in 1841, and later also by K. Rosenkranz himself, who earlier defended Hegel against these charges, see esp. Höhle (1988: 239–49). Accordingly, also Kabeshkin wants to disregard empirical aspects that Hegel discusses in his *Logic* like ‘death’ and ‘pain’, ‘sexual reproduction’ (2022a) as mere illustrations or exemplifications, or as helpful metaphors at best. I do agree that a logical notion of ‘Life’ should entail the aspects of a ‘drive to unify’ and to ‘differentiate’ in the way that Kabeshkin takes Hegel to argue. Similar to Kabeshkin (and Hegel), such a notion would refer to a reality that is essentially and intrinsically structured by purpose. I do think, however, that such a notion within externality of objectivity (a ‘logical notion of life’) and within the realm of culture (the ‘logical notion of spirit’) would have to be *separated*, because different logical relations hold and different categories are needed, as I will allude to at the end of this paper. But I admit that the difficult question of how to justify Hegel’s chapter of objectivity in the *Logic* against the many objections cannot be solved in this paper.

⁷⁷ ‘Moralia’ (values) and ‘Qualia’ (mind) are the two phenomena that are difficult, if not impossible to integrate into a reductive naturalistic worldview, see Spahn (2011).

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