

Alexander T. Englert

LIFE, LOGIC, AND THE PURSUIT OF PURITY

Logically Reconstructing the Transition to Cognition★

ABSTRACT: Hegel erklärt in der *Wissenschaft der Logik* unmissverständlich, die Kategorie des Lebens sei eine streng logische. Seine Behandlung der wirklichen Lebensformen – derjenigen, welche die Natur konstituierten – folgt auf die Anwendung der Logik unter den Bedingungen von Raum und Zeit in der Naturphilosophie. Dennoch ist die Entwicklung dieser Kategorie als rein logische in den Augen vieler Kommentatoren besonders schwierig nachzuvollziehen. Sie finden diese sogar nur unter der Annahme verständlich, Hegel breche sein Versprechen, das Logische vorausgehen zu lassen. Wenn Hegel die logische Entwicklung an diesem Punkt allerdings von der Biologie anführen ließe, würde dies Probleme nach sich ziehen. Es würde nicht nur den Abfall von seiner spekulativen Methode darstellen, welche Notwendigkeit gewährleisten soll; es würde auch die Allgemeingültigkeit des ontologischen Status' der Kategorie gefährden. Entscheidender ist jedoch, so meine These, dass diese Lesart den Übergang zur nächsten Kategorie, ‚Erkennen‘, unverständlich macht. Im folgenden Aufsatz wird zunächst argumentiert, dass logisches Leben als reine Kategorie gelesen werden kann. Davon ausgehend wird in einem zweiten Teil erklärt, inwiefern der Übergang zum Erkennen in dieser Lesart verständlich wird, ohne auf profane oder übernatürliche Deutungen zu rekurrieren.

Introduction

In the “Idea” section of the *Science of Logic*¹ (hereafter: *Logic*), Hegel arrives at ‘life’ as a category of *pure* thinking. There remains, however, general skepticism as to Hegel’s success in preserving the purity he sets out to maintain. A strong current in Hegel scholarship pushes for a reading that sees Hegel letting the logic be led by biological analogies and thoughts of animal life, thereby endangering the generality of the ontological status of the category.² Beyond undermining the logical integrity of the category, I will argue that such a reading further makes

★ For their help and time in improving earlier drafts of this paper, I cannot thank enough Anton Friedrich Koch, Dean Moyar, and Roberto Vinco. Also, an anonymous peer reviewer greatly improved the quality of the paper with his or her comments; for this, I am very grateful.

¹ All references to the *Logic* are taken from the George di Giovanni translation: G.W.F. Hegel, *The Science of Logic*, translated by George Di Giovanni (Cambridge, 2010). Because di Giovanni refers to the *Gesammelte Werke* volumes and page numbers in the margins of the translation, I only include these references for the critical editions.

² First and foremost is J.M.E. McTaggart’s *A Commentary on Hegel’s Logic*. He will often be placed as my main interlocutor when a challenging voice is needed. However, this view is also shared by others, e. g., Taylor (1975) and Düsing (1986), who also think that Hegel is thinking first of animal life and then letting this biological presupposition guide the dialectic. Also, Sell (2013) presents a case for Hegel’s concept of logical life necessarily being ‘oriented’ towards natural life.

the transition to the next category of cognition unintelligible and problematic. Thus, the *purity* of the category of life is essential for the consistency of Hegel's project, the general ontological applicability of 'life', and the success of the conceptual transition to the next category of the idea. As a result, one is unsurprised that Hegel states, quite decisively, that the category of life should remain concerned *only* with "the logical life as [pure] idea" (GW 12: 180).³ Unsurprising also because of Hegel's unequivocal position regarding the logic in general as that which must remain prior to and independent of the realm of nature, *even* the concepts of space and time.⁴ For only by such a method is its conceptual necessity ensured due to independence from the contingency of experience. Therefore, if he lets empirical concepts *lead* the *Logic*, this would bring in tow the debilitating triumvirate of consequences listed above.

My aim in what follows is to reconstruct life as a purely logical category and make the transition to cognition intelligible. In order to deliver on this tall order, I have tried to make the following paper as rigorously structured as possible. It is broken into two major parts. For life to remain ontologically general and its transition successful, Hegel must remain methodologically consistent. Thus, I must begin with an account of how 'life' as a category can be considered logically pure. This task constitutes the initial section, "I: The Meaning of Life". The first subsection deals with what 'logical' life could mean and takes it as an assumed premise; the second subsection deals with reasons for accepting this assumed premise. Then, with this foundation built, I move onto the final section, "II: Life in Transition". There I reconstruct the final logical steps that transition to cognition.

Her argument for this is heavily tied to historical exegesis of the development of life in Hegel's earlier thinking. However, *what* precisely 'orientation' means in a logically pure space raises many questions. First and foremost: without presupposing natural life, and assuming that in so doing it remains outside of the pure logical development, what possible role could it play as a compass which would simultaneously avoid the issues listed above?

³ The original German is: „das logische Leben als *reine* Idee“ (my emphasis). Why di Giovanni decided to leave out the adjective 'pure' is clearly innocuous as such; for my purposes, however, it is an important adjective that states explicitly where logical life is situated – namely in the pure realm of the idea as such.

⁴ The concepts discovered in the process of the logic will engage in determining nature once they are set under the conditions of space and time – this project though is no longer logic, but rather a philosophy of nature.

I. The Meaning of Life

A. Life as Logical

In this section, I explore the meaning of ‘life’ as a logical category of pure thought. What ‘life’ as a pure category determines presents a great challenge to the reader. This challenge arises primarily because life is commonly thought of as a fact of the world, *independent* of thinking. Indeed, most conclude that thinking *presupposes* life instead of the other way around.⁵ Thus, a *pure* notion seems an absurd setting of the cart before the proverbial horse.

Nevertheless, Hegel explicitly flips this notion on its head by arguing that life can be derived solely from the evolution of logical space⁶, which, in turn, should have content without aid from any empirical importation.⁷ However, Hegel can appear to betray his own project with smuggled-in “biological analogies”⁸. Indeed, the text seems rife with them because of its reference to concepts like

⁵ That includes Hegel scholars such as Charles Taylor who think him guilty of introducing life as a prerequisite, biological substrate that must precede thinking since thinking presupposes finite beings to *do the thinking*: “Hegel shows it to be a necessary feature of the universe that the world appears to a subject. The underlying reason seems to be this: conceptual necessity means a necessity of thought and this presupposes a thinker” (Taylor 1975, 331). As a result, this is one of the deciding factors, according to Taylor, for why life comes *first* in the idea chapter: “We start with Life, both because it is the immediate unity of Idea and reality, and also because knowledge presupposes life” (Taylor 1975, 332). Note: with ‘knowledge’, Taylor means ‘cognition’. For a similar take, cf. Nicholson (2000, 55–65, esp. 56).

⁶ The notion of Hegel’s logic as being the ‘evolution of logical space’ is an idea that I have adopted from Anton Friedrich Koch’s manner of reading Hegel, a phrase that also happens to be the title of his collection of essays: *Die Evolution des logischen Raumes – Aufsätze zu Hegels Nicht-standard-Metaphysik*. I share with Koch the conviction that one must start at taking Hegel by his word, whether his method succeeds is another question entirely.

⁷ For further confirmation of this, one needs to look no further than §245 in the *Enzyklopädie der philosophischen Wissenschaft* (all references will be to the *Gesammelte Werke* editions and my own translation), in which Hegel introduces the notion of a philosophy of nature. He criticizes attempts to study nature starting from “particular *finite* ends” (GW 20: 235). This is because they will progress by taking these finite ends as “presuppositions, whose contingent content can be, even for itself, insignificant and hollow”, and which seek in the immanent “relation of ends [*Zweckverhältniß*]” a deeper manner of explanation than that which can be offered by examination of “external and finite relations” (GW 20: 235). Instead, what is sought is *necessity*, which is offered from “the point of view [*Betrachtungsweise*] of the concept, which is immanent to its own nature in general and, therefore, nature as such” (GW 20: 235). Thus, knowledge of nature *presupposes* that which the concept produces of its own devices, even if it need not be considered temporally prior.

⁸ McTaggart concludes after evaluating the transition from life to cognition that, “I cannot see that [Hegel] is justified” (McTaggart 1910, 290). For now though, it suffices to say that McTaggart takes Hegel to be “misled by biological analogies” (McTaggart 1910, 290) and, in so doing, to stray from pure thinking to classes of biological life that cannot function in the fashion that McTaggart thinks necessary for the transition to work. McTaggart’s rejection of the transition’s justification I will detail below.

‘irritability’, ‘pain’, ‘reproduction’, and ‘death’. And many commentators conclude that Hegel here is wiggling free of his promise and cannot have anything in mind but the slimy, real biological world of toads, tuna, and tigers.⁹

Let us revisit why this may not occur. The purity of the logic prescribes that one can derive nothing from the empirical concepts. For if one does, the enterprise cannot claim necessity. For its necessity depends on the logic’s self-sufficiency which Hegel seeks to establish by beginning without presuppositions. To avoid contingency, one lets pure thinking begin without anything but the thought of, what external reflection labels, an “indeterminate immediacy” (GW 21: 68). From then on, it is imperative that the logic remains pure. Let us, then, grant as an assumed premise that Hegel must mean what he says when stating that logical life is a pure category.

What though does this mean? Hegel’s logic remains difficult to define. The logic is a system of thought that examines nothing other than itself: “[Logic’s] subject matter, *thinking* or more specifically *conceptual* thinking, is essentially elaborated within it; its concept is generated in the course of this elaboration and cannot be given in advance” (GW 21: 27). Thus, Hegel’s system provides its own content in the course of thinking’s autonomous “elaborations”, and these elaborations “far from lacking the matter required for an actual and true cognition, [are] its content [...], which alone is the veritable matter – a matter for which the form is nothing external, because this matter is rather pure thought and hence the absolute form itself” (GW 21: 34). How does ‘life’ function as a category in such a unique methodological project?

For everyday thought, it remains quite counter-intuitive to treat ‘life’ as *formal* or *logical*.¹⁰ This is due, first and foremost, to the baggage that one cannot

⁹ For Taylor’s reason, see n. 5 above. Klaus Düsing is motivated by other reasons for adopting an impure reading of Hegel’s category of life: “Gerade die Bestimmung der lebendigen Individualität in der Logik [...] deutet darauf hin, daß Hegel als das eigentliche Lebendige das Tier vor Augen hat. [...] Der Anspruch, in der spekulativen Logik das reine ‘logische Leben’ als unmittelbare Idee, nicht das Leben der Natur oder des Geistes darzulegen, verschiebt sich damit; es wird vielmehr nur das ‘natürliche Leben’ in seinen Grundbestimmungen expliziert” (Düsing 1986, 281). Düsing particularly emphasizes the difficulty that this reading could entail for the ontological generality that the category should aspire towards: “Freilich kann dann dem Leben als Inhalt der Idee, insbesondere wenn nur spezifische Grundbestimmungen des Animalischen entwickelt werden, nicht mehr die ontologische Allgemeingültigkeit zukommen, die Hegel ursprünglich dafür intendiert hat” (Düsing 1986, 282).

¹⁰ For a recent attempt to re-establish life as a category of some kind, see Michael Thompson. He agrees with Hegel in principle: “Hegel, I think, was so far right. Thought, *as thought*, takes a quite special turn when it is thought of the living” (Thompson 2008, 27). However, he takes issue with Hegel’s attempts to establish it as a special concept because: “in Hegel [these thought-structures] are given a kind of independent logical representation, but one fused with a (for me) ungraspable method and a completely indefensible form of expression in writing” (Thompson 2008, 12). These two external objections are paired with one explicit immanent one. Thompson refers to Hegel’s attempt to establish an expressive logic in contrast to the standard manner that

help but schlep along as an advanced student in the sphere of concept use. In fact, Hegel openly encourages the reader to leave all conceptual baggage behind before following the dialectic development of life: “[T]his is not the place to concern ourselves with how life is treated in non-philosophical sciences but only with how to differentiate logical life as idea from natural life as treated in the *philosophy of nature*, and from life in so far as it is bound to *spirit*” (GW 12: 180). He follows up this claim by making further explicit what does *not* constitute logical life: namely, that which is “exposed to the *externality of existence*”, and that which is “*conditioned* by inorganic nature”, which then has, as a result, “a manifold of actual shapes” (GW 12: 180). Instead, *logical* life is “without such *presuppositions*, which are in the shapes of actuality” (GW 12: 180). “Shapes of actuality” reside beyond the *Logic*, as conditioned forms of the manifold – say, a sea turtle searching the ocean for algae or a chinchilla hiding out under a rock. Such shapes derived from experiencing simply cannot guide the logical development because we are at a point where any mention of space and time must include the caveat, “if these [i. e., space and time] could already be mentioned here [i. e., in the *Logic* at all]” (GW 12: 181). Therefore, all life presupposes is the laying of the logical bricks that has preceded it in the speculative dialectic.¹¹ If Hegel breaks away from this clearly drawn distinction between logical life and natural life *after just a few pages*, one would seem forced to infer either an embarrassing carelessness or a willed decision for inconsistency which Hegel hoped would go unnoticed.¹²

theory is “poor, gray, [and] lifeless” (Thompson 2008, 26). However, Thompson then states: “Even if there *are* special ‘forms of thought’ allied to the concept of life, it is anyway hard to see how they would be any more or less *dead* than those linked to the concepts of, say, being and quantity” (Thompson 2008, 26). This immanent objection, however, loses all force due to his preliminary external objections, for from someone who finds Hegel’s method ‘ungraspable’ one cannot expect a serious understanding as to how life as a category is set apart from the earlier categories of being and quantity. The rest of this section offers an explanation as to why Hegel’s category is indeed allied intimately with life. Whereas being and quantity represent moments in the logic that are designated by tension with that which is different from them, by the time one has reached the idea and life, it is the encompassing of the *movement* or transitioning of the logic itself that is taken up as a category. Thus, the category, in contrast to the more atomistic preliminary categories, is marked precisely by its liveliness as a processual whole, uniting various moments together that earlier might have been posited as initially independent. It is my hope that the rest of the paper answers Thompson’s immanent objection by showing precisely how *vital* the category of life really is.

¹¹ Particularly that concerning the development of the concept “that came on the scene earlier as a subjective concept”, and which “is the soul of life itself; it is the impulse that gives itself reality through a process of objectification” (GW 12: 180).

¹² A third alternative exculpating Hegel is found in Sell: “Es soll in der Logik zwar nichts von außen hinzukommen, und es gilt, dass die Logik ‘rein’ sein soll. Doch ist die Logik auch als Ontologie zu verstehen, da es um Bestimmungen dessen geht, was ist. So ist es auch möglich, dass sich Begriffe, die der Wirklichkeit entstammen, in der *Logik* befinden. Die Denkbestimmungen sind Seinsbestimmungen” (Sell 2013, 209). I agree with her conclusion that the logical determina-

Let us, then, think our way into Hegel's notion of the *logical*. I find the reading by Hans-Georg Gadamer in *Hegel's Dialectic* clear and insightful. There he asserts that the logical "is the entire cosmos of ideas as Plato's philosophy dialectically develops it" (Gadamer 1976, 78). According to Gadamer, it is essential to understand that, for Hegel, "Ideas exist only linked, mixed, or interwoven as they are encountered in discussion or are 'there' each time in the discourse of the soul with itself" (Gadamer 1976, 80). On the one hand, the speculative logic examines its categories as the *true* forms of things in their actuality.¹³ On the other hand, its examination discovers these categories in the reflective process of thinking itself. If we take this interpretive course, then life will be both a form that belongs to *what* we mean by life and *how* this meaning arises from thought. Logical life (qua idea) would be both a form of things and of thought.

This coarse-grained notion of life qua logical category allows us still to emphasize *purity* as our watchword. The logic moves from itself alone and can only be, *post hoc*, constitutive of empirical cases of life, i. e., once the logic is set under the conditions of space and time. In order to continue filling out the picture of what life could be in logical terms, one must take heed of where it is in the development of the logic itself. By the time that one has reached the Subjective Logic's idea in which life is the first category, one has found an *adequacy* that holds between the form of things and the form of thinking: "Since the idea is the unity of the concept and reality, *being* has attained the significance of *truth*; it now *is*, therefore, only what the idea is" (GW 12: 175). Here Hegel claims that the idea is already the unity of the concept and objectivity, and life is, therefore, something that cannot be taken as one-sided (i. e., as something taken simply as an *internal* principle qua concept, or as something that is purely an *external* actualization of the concept's content). In order to proceed one must make clear the notion of 'adequacy' that seems to be the key characteristic of the idea in the Subjective Logic.

'Adequate' is how Hegel describes the resulting relation between the concept and objectivity. This adequacy-relation is the result of the "Subjective Logic" in which the concept and its corresponding objectivity exist in a processual

tions of thought are simultaneously those of being. However, I am unsure how one gains access to concepts from reality simply by virtue of his project having a strong ontological dimension. Indeed, such an attempt seems in flat-out contradiction with Hegel's methodological commitments. As will be seen below, I agree that some of the words Hegel uses are taken from reality. However, these words are not giving the thoughts *content* – rather they are helping to give the content of thought objective form via linguistic approximations (see my section "B.1. Constructing Life Purely" below).

¹³ Taylor also sees the idea in a vein akin to Plato's forms: "[The idea] is the inner reason which makes the external reality what it is" (Taylor 1975, 328). I agree with him and think that the level of idea aspires to capture this manner in which thought seeks unflinching the cognition of 'why' things are the way they are – not just 'how' they must appear.

relationship that is related back to itself in a particular way. I think of adequacy here as analogous to the process that springs up from the relation between a thing's potential (roughly, its concept) and a thing's reality (roughly, its objectivity). Remember, though, always to return to *purity*! As difficult as it seems, we cannot mean *at first* the adequacy between an empirical concept, say, 'platypus', and the actual mammals laying eggs along the Eastern coast of Australia. Instead, the *Logic* is looking for the adequacy between concepts discovered in pure thinking. Prior to the "Idea" chapter, there was a lack of adequacy because of one moment or another taking precedence. For example, the "Mechanics" chapter of "Objectivity" was the first conceptual handling of the relation found to express the externality of concepts; however, its emphasis on externality in the determination of relation revealed itself to be hollow. The blind interplay between independent objects reveals itself as an essential *part* of the independent objects themselves. In turn, the interaction is essential to the very concept of the object as such – the emphasis on the external loses its anchoring in the externality. It implies, instead, an inner quality of interdependence between objects, thus settling the emphasis eventually into the conceptual heart of things. The emphasis is now again on the freed concept qua totality, but as an inner determination that guides the outer – i. e., in the ultimate seed of the external formation as the immanent *telos* of the concept.¹⁴ The "Teleology" chapter that represents the result of "Objectivity" ends with the conclusion that the concept and objectivity belong together but in a way that forms a moving and unified totality, as opposed to two, one-sided totalities.¹⁵ The criterion, following for the whole "Idea" chapter, is that adequacy between concept and objectivity be fully attained in the process of reciprocal mediation. One can speak of 'should' in this context as when something is inadequate to its concept, or a concept is inadequately realized: 'Something *should* be a certain way, but is not'. The

¹⁴ 'Totality' really cannot be emphasized enough because it seems to be the reason for a transition to the idea of life; teleology needs to transition because if left determined as about simply *some* object, it will not achieve full adequacy because the object will always refer to the processual whole in which it receives expression. In *The Dialectic of Teleology*, Willem deVries describes this inadequacy in the following manner: "The inadequacy of teleological explanations of finite objects and events [...] are inadequate because they are essentially *incomplete*, pointing to an infinite set of prior and posterior conditions that cannot be grasped within the explanation" (deVries 1991, 66). Thus, drawing on the contingency of a bad infinity of sorts, the teleological category requires complementation by the good infinity of a system that is self-referring.

¹⁵ One could label this discovery of the inner directing the outer expression as 'inner purposiveness'. The difference between inner and external purposiveness is a distinction that Hegel praises Kant for making and which Hegel claims made possible the very "opening [*aufschließen*] of the concept of *life*, the *idea*" (GW 12: 157). Thus, the notion of life as a category has been reborn by the reintroduction of the form of inner purposiveness. For a discussion of the influence of Kant's *Critique of the Power of Judgment* on Hegel in relation to this specifically and what it means for life, see Kreines (2014); Dahlstrom (1998).

interconnected nexus of concepts and their realizations persists as inadequately connected as long as they fail to recognize that their truth lies not only in themselves or in the other, but in the process itself that mediates these relations. The “Idea” chapter differs from what has come before in that it unifies the previous elements, showing their truth to exist in process as *one* totality – i. e., in the striving to achieve full adequacy between concept and realization thereof. Until now, the focus has gone from the concept (the internal) to the objective realization (the external) and concluded that both are interdependent and, in a sense, representative of totality. Now, the interdependent relation between the two is taken up. This interdependence, in turn, creates a processual whole that one might call, when stepping back, a ‘system’ in motion.

Returning to our coarse-grained definition of logical life, we can refine it even further. Logical life is a pure category as a form of things and of thought. Now, we can say that the form of things has to do with the concepts gone before and their necessary articulations; and the form of thought is the result of the dialectic showing that both concept and objectivity create a moving, processual whole.¹⁶ The conceptual realm in the dialectic has found itself to be a *growing* affair in that a concept involves necessary development and the development requires conceptual foundation. Hegel describes this self-moving, impetus inherent to the forms of thought as the logic’s discovery of its ‘soul’; combined with its externalization, one has a category that is a processual whole moved by an inner *telos*:

[Life] is in logic the simple in-itselfness which in the idea of life has attained the externality truly corresponding to it; the concept that came on the scene earlier as a subjective concept is the soul of life itself; it is the impulse that gives itself reality through a process of objectification. (GW 12: 180)

Unpacking this leads us over familiar ground. Life is the first step in a completed process of the concept not only establishing itself (being self-sufficient), but also the concept realizing itself (being self-productive). ‘Soul’ [*Seele*] here has its roots directly in Aristotle’s *De Anima*, where he refers to soul as “in some sense the principle of animal life” (*De Anima*, 402a1–402a9, 641).¹⁷ Hegel applies it in a manner just as foundational but free of direct reference to animal corporality or

¹⁶ See Sell (2013, 93, 97, 118, and 120), for whom life is always connected with ‘movement’, which she takes to be the common denominator that connects all of life’s various employments throughout Hegel’s works (e. g., his use of life beyond pure logical space and his metaphorical uses of it).

¹⁷ See also my note 24 below discussing how leading biologists of Hegel’s day employ the word ‘soul’ to refer, in turn, to this fundamental principle of all living matter. For a detailed analysis of the influence of Aristotle’s notion of the soul on Hegel, along with Hegel’s misinterpretation of it, see Sell (2013, 139–150, esp. 144 f.).

mentality: “it is the impulse that gives itself reality”. Logical life is, thus, related to the self-determination of outer realization discovered in the logical form of teleology, but one step further.¹⁸ As such, it is something that represents the completed and adequate movement of the concept *post* “Objectivity” – it is “in and for itself absolute *universality*; the objectivity which it possesses is throughout permeated by the concept, and this concept alone it has as substance” (GW 12: 181). As “in and for itself absolute universality”, soul is that which grounds something’s being absolutely “self-referring” (GW 12: 181). As “substance”, soul is that which grounds something’s ability to “exist for itself” (GW 12: 181).¹⁹ On the level of reflective thought, it is reason finding itself as an unconditioned moment driving the logic along, and, thus, not as static and still but rather as an impulse.²⁰ However, this reflective thought is still entangled with a more immediate form in which the concept propels its moments, moments that, thereby, move towards the systematic whole in which they are embedded.

It is my hope that the above discussion has painted a credible picture of what life might mean as a *pure* logical category. It is a form of things and thought applied to the realm of pure thinking itself; as a form of this realm, it is the propulsive movement itself that has shown to hold necessarily between the concept and its own self-determined realization. To complete this brief discussion of life as ‘logical’, it is important to highlight the fact that even as a *pure* category, its definition is not something that, once derived, remains alien to the actual, contingent shapes of actuality. On the contrary, it should represent the *truth* of that occurring outside of the pure dialectic. Or as deVries puts it, the “complex real-world interactions are mirrored in the conceptual realm as well” (deVries 1991, 64), though I would emphasize that it is not just a conceptual mirror, but the necessity-lending structure itself that is here being developed.²¹ In summary, the work done to

¹⁸ In deVries account of the teleological category *for* organisms, a similar understanding is developed for understanding ‘soul’ as the concept determining the organism’s development: “The organism is what it is because of the ideal – the concept – it strives to embody, and this ideal is teleologically effective within the organism. An organism is *ensouled* by its concept” (deVries 1991, 64).

¹⁹ “Only as this *negative unity* of its objectivity and particularization is life self-referring, life that exists for itself, a soul” (GW 12: 181).

²⁰ Cf. Düsing, where he claims that Hegel gives no definition of what is meant under ‘logical life’. He surmises that logical life is for Hegel “the immediate unity of the concept and its adequate, conceptually determined objectivity” (Düsing 1986, 279; my transl.). Further, “the concept is not taken as the traditional *conceptus communis* [...] but rather as the spontaneous, self-referencing activity of subjectivity that progresses out of the spinozistically-thought of One Substance and its actuality [*Aktuosität*]” (Düsing 1986, 279; my transl.). The key is the connection with the activity to subjectivity, as opposed to some other *biological* activity, which I think is essential to unlocking *what* precisely Hegel has in mind with logical life.

²¹ As already mentioned, all one must do is set these concepts under the conditions of space and time to enter into the philosophy of nature. The result should then be grounding for further empirical investigations. Some will legitimately be concerned with this claim. Does it amount to a

excavate logical life is that which undergirds the *knowing* of things that will then demonstrate the processual necessity found in experience.

Any person unfamiliar with Hegelian terminology will find this all ringing of hocus-pocus. The flurry of terms can plunge one into a dizzying spin without some sort of Polaris to remain oriented by. Thus, I propose that we take §215 from his *Encyclopedia* as our guiding star: “The idea is essentially *Process*, because its identity is only the absolute and free identity of the concept insofar as it is the absolute negativity and, thus, dialectic” (GW 20: 218; my transl.). Life is, therefore, as idea always in process. It is the flowing course of self-reference taking place *whenever* and *wherever* (since we are not concerned with space and time here) constituent moments are going through the process of exchange that gives them truth and reality due to their place in a systematic whole, in which “[w]hatever is distinguished as part, or by some otherwise external reflection, has the whole concept within it” (GW 12: 182).²²

B. The Logical Road to ‘Gattung’: In Support of Purity

One now has an idea as to how our assumed premise can be shaped. By logical life, on the reading I want to put forth, Hegel means something like the categorical form of a self-referring, processual whole (or totality), consisting of moments that could be treated independently but whose meaning depends on a systematic

sort of idealism in which thought *determines* nature? And if yes, then does this not create problems for *objective* truth? These questions, to my mind, deal more with the transition from the logic to the philosophy of nature. I find, though, that one can clarify these questions both in and beyond the logic if one attends to a distinction drawn by William Maker regarding Hegel’s brand of ‘idealism’. Maker calls Hegel a “*methodological* idealist” and a “*critical* idealist”, rather than a “*metaphysical* idealist” (Maker 1998, 4). “Methodological” in the sense that Hegel considers “strictly self-determining thought to be the only mode of philosophically justifiable cognition” (Maker 1998, 4); “critical” in the sense that Hegel “thinks a system of autonomous reason can articulate the truth about reality” (Maker 1998, 4). Combined, these entail only a self-determining, immanent process for which an ‘absolutely other’ is required (period), which, thus, makes his logical process not only consistent with, but also *dependent* on a nature that is independent of thought – even if, in the end, they become inextricably interwoven. For a detailed description of how the logical category of life continues on in development through the philosophy of nature (along with detailed attention to the historical context in which he was writing), see Ferrini (2009).

²² To take this back to the notion of life as the immediate form of idea, one is faced with the process at the initial level of connection between concept and objectivity as unity. The key is that the processual movement is one that is self-initiating in a fashion that sets the conceptual as the immanent motor of its objective expression. I believe that this is similar to what Düsing means when he defines life as follows: „Wird diese Einheit von Begriff und Objektivität nun eigens realisiert und vollzogen, so daß der Begriff jener Objektivität rein immanent ist und bleibt, dann tritt diese Einheit zunächst als unmittelbar realisierte auf; sie ist es, die Hegel als Leben denkt“ (Düsing 1986, 280).

understanding of their development in the whole. It now needs to be argued as to why a strict eschewal is necessary of the position that biological inputs or analogies lead the logic. Besides keeping Hegel consistent methodologically—speaking and ontologically general, not to mention genuine in his explicit proclamations that life is indeed *pure*, I believe it allows one to keep on reading through the transition. For if Hegel is indeed letting biological analogies lead the logic, then, a classic rejection of the transition remains in force, namely, McTaggart's charge that Hegel is misled to something of a fallacy of equivocation.

It is my belief that doubt in the purity of Hegel's notion of life can be effectively addressed by doing some philosophical weeding around two issues: first, around the issue of *how* one could possibly arrive at these concepts without drawing from experience; second, around the issue as to (once one already possesses these conceptions) what it means to speak of them in purely logical terms. The weeding I do around the first issue focuses on why one should avoid being misled by Hegel's words and instead look to the thoughts themselves (1.). To address the second issue requires a progression from where we left off after the first section – however, I reconstruct it as a direct alternative to McTaggart's argument that Hegel is cheating at his own game (2.).

1. *Constructing Life Purely*

Reasons for doubting Hegel's sincerity when developing logical life are easily located in the words that Hegel employs. The section of life as "The Living Individual" begins, innocently enough, with a dialectical development of the internal determination of life as relation between concept and reality. To posit this relation at all, the concept must belong to the world as member with the capability to realize itself therein. It "contains determinate externality, as a *simple* moment" (GW 12: 183). This simple moment that it finds conceptually contained in itself is its 'corporeity' (*Leiblichkeit*). Suspicion begins to grow. However, things get hairy once the dialectical development begins to unfold the conceptual make-up of a living thing's corporeity in terms of its objectivity. For Hegel calls this objectivity of the living thing – this first logical moment of logical life's objective totality – the "organism" (GW 12: 184). Suspicion continues to grow. For how should logical space, in which it seems justified to speak of internality and externality, along with things and their relations, arrive at a pure idea of an organism without the aid of outside experience?²³ An abstract category of life as self-determined

²³ Of course, a similar objection could have arisen with the introduction of previous categories, e. g., 'chemism'. This tension between the words chosen and the supposed purity of thought carries throughout much of the *Logic*.

system is one thing, but organism seems like a particular instantiation bespeaking material, sweaty existence. Suspicion only continues to mount with the subsequent conceptual determinations of an organism's 'sensibility', 'irritability', and 'reproduction'.²⁴

These suspicions only continue to mount when in the second section of "The Life-Process" Hegel speaks of "pain" (GW 12: 187–188) and "feeling of self [*Selbstgefühl*]" (GW 12: 189), not to mention "propagation of living species" in the final section of "The Genus" (GW 12: 191). The issue with all of these terms is that they tempt one to take Hegel as moving from the realm of nature to the realm of logic.

²⁴ These terms were quite common in the field of biology during Hegel's day and there is clear evidence of his engagement with them in relation to Schelling's philosophy of nature (cf. Sell 2013, 161–167). Of great influence, for example, was Albrecht von Haller (1708–1777), with whom Hegel was familiar (see GW 21: 282), who published in 1753, "De partibus corporis humani sensibilibus et irritabilibus". From an English translation titled, *A Dissertation on the Sensible and Irritable Parts of Animals*, one sees von Haller locate the origin of the term 'irritability' back to Francis Glisson (1597–1677), "who discovered the active force of the elements of our bodies", and "was the first who invented the word *Irritability*, which he attributes to *natural perception*" (von Haller [1755] 1936, 42–43). Von Haller attempts then to distinguish sensibility and irritability via a series of experiments on animals: "I call that part of the human body irritable, which becomes shorter upon being touched" (von Haller [1755] 1936, 8); "I call that a sensible part of the human body, which upon being touched transmits the impression of it to the soul" (von Haller [1755] 1936, 9). These thoughts are directed explicitly against the theory of nerves established by Herman Boerhaave (1668–1738), whose 'system' von Haller had "elsewhere refuted" (von Haller [1755] 1936, 9). Further, John Brown (1735–1788), another influential thinker in Hegel's day and one whose thinking he mentions explicitly around §296 in his 1819/1820 Berlin lectures on the philosophy of nature (see V 16: 187), expanded the notion of sensibility and irritability to be the common denominator of life in general in Chapter II of his major work, *The Elements of Medicine*: "In all the states of life, man and other animals differ from themselves in their dead state [...] in this property alone; that they can be affected by external agents, as well as by certain functions peculiar to themselves [...]. This proposition comprehends everything that is vital in nature" (Brown 1788, 3); and at the beginning of Chapter III: "We know not what excitability is, or in what manner it is affected by the exciting powers. But, whatever it be, either a certain quantity, or a certain energy of it, is assigned to every being upon the commencement of its living state" (Brown 1788, 7). Also, Erasmus Darwin's popular work, *Zoönomia, or laws of organic life*, included a detailed account of the principles of life reducible to the animal's nervous system. Darwin referred to these as faculties of the animal's 'sensorium': "The word *sensorium* in the following pages is designed to express not only the medullary part of the brain, spinal marrow, nerves, [...]; but also at the same time that living principle, or spirit of animation, which resides throughout the body" (Darwin 1794, 5). The four faculties of the *sensorium* were termed, "irritability, sensibility, voluntariness, and associability" (Darwin 1794, 21). In more detail: "Irritation is an exertion or change of some extreme part of the sensorium residing in the muscles or organs of sense, in consequence of the appulses of external bodies" (Darwin 1794, 21); and, "sensation is an exertion or change of the central parts of the sensorium, [...] *beginning* at some of those extreme parts of it" (Darwin 1794, 21). This work gained wide popularity and was immediately translated into German and published in Germany from 1795–1799. Working within this milieu, Hegel uses these terms not to take from the various theories of biology that worked by listing criteria for life forms, but rather to illustrate that in conceptual development there are stages that approximate the meanings of these terms.

In order to subdue this skepticism, one needs to first pay heed to the role of language in the *Logic*. Though there is no explicit content presupposed from the start as to *what* the *Logic* should reveal, at the very least one begins with thought in some broad sense. And in developing the categories of thought, this endeavor remains primarily concerned with thoughts and not the words that give thought voice. Language, however, remains indispensable to the project. In the words of Stephen Houlgate in *The Opening of Hegel's Logic*: “[I]t is only through words that our thoughts come to be something objective and determinate for us. Thoughts cannot be pictured or felt but need to be named and explained if they are to become something definite” (Houlgate 2006, 75).²⁵ Now, add to thought's dependence on language the role that Hegel sees as the right of philosophy: “It is the privilege of philosophy to choose such expressions from the language of ordinary life [...] as *seem to approximate* the determinations of the concept” (GW 12: 130). Thus, Hegel's use of concepts such as ‘pain’ must first be examined as best approximations to the dialectic of a series of categories arising out of the idea of life. Consequently, the words themselves follow from the logic instead of the logic following from the words, and there is but an imperfect relationship holding between a word and its thought rather than a perfect identity.

Thus, the avenue of finding evidence of illicit guidance via words is closed off to the skeptic. The skeptic, however, is not done. She grants the point that one should attend first the logical development of thought before jumping to conclusions about the words employed. However, she moves then to question the thoughts themselves. If not in word, is Hegel still guilty of letting biological analogies do the logical legwork in thought?

My offer to answer this will remain brief. If one takes the theory of conceptual evolution seriously – i. e., that concepts indeed do give way necessarily to other succeeding concepts without which they would remain incomplete and to which they necessarily refer, *and so on* – then one must also adopt a position that maintains that the logical construction of the concepts has a form that in principle remains separable (and if necessary) prior to application in nature. And if one grants this point, then it further follows that in the process of logically unpacking a concept given as a necessary whole (e. g., the idea of life) that certain parts will be constructible from the whole without needing to be given

²⁵ See also his reference to §462 of the *Encyclopedia* (GW 20: 459–450) in which Hegel describes the relation between the naming of something and the thing itself; and the *Logic* (GW 21: 10): “In everything that the human being has interiorized, in everything that in some way or other has become for him a representation, in whatever he has made his own, there has language penetrated, and everything that he transforms into language and expresses in it contains a category, whether concealed, mixed, or well defined”.

separately. Further, if one agrees that the idea is intelligible (as unity of concept and object), then the logical moves employed in the dialectic of life itself remain justified (since they simply draw on the same dialectical operators from before).²⁶ In short, construction of new logical concepts is kit and caboodle with the movement of logical concepts.

2. *Constructing Life as Systematic the Whole Way Down*

In the previous section, I argued for reasons to accept a pure reading of logical life. In what follows, I go through some of the general features of “The Living Individual” and “The Life Process” in order to follow the logical road to “The Genus”. After reconstructing the logical movement as presented by Hegel, I present my argument against McTaggart’s position that Hegel comes to be misled by biological analogies. I argue that it is not Hegel, but McTaggart who is led by biological analogies to misunderstand what is going on in the *Logic* at the stage of the idea of life.

To begin, every stage of logical life is processual. In the *Logic*, Hegel refers only to the second and third stages of life as explicitly processual. However, we also infer that the living individual constitutes a processual whole. Explicit confirmation occurs in the §217 of the *Encyclopedia*, where all three stages of life are referred to explicitly as process: “[*das Lebendige*] is thus the process of its unification [*Zusammenschließen*] with itself, which proceeds through *three processes*” (GW 20: 219; my transl.).²⁷ The first process is detailed in §218, where he refers to the first stage as the “*Prozeß des Lebendigen*” as “internal to itself [*innerhalb seiner*]” (GW 20: 220; my transl.). Each successive stage of life is always the processual whole of logical life, albeit at different grains of detail within the larger movement of the idea. Just as logical life is pure all the way down, so too it is process all the way down.

The first processual stage is “A. The Living Individual”, the most immediate systematic whole. Logically, we take a conceptually permeated object as our starting point. It is initially confronted with itself as both immanently determined and externally actual. This external actuality, however, appears at first

²⁶ In response to those thinking, showing is better than telling – *Hic Rhodus, hic salta!* – I give my attempt at a reconstruction in the following subsection, “B.2. Constructing Life as Systematic the Whole Way Down”.

²⁷ The notion of life as process already arises in the Jena 1804/05 Systementwurf: “Diß Leben ist als Geist, nicht ein Seyn, ein Nichterkennen, sondern es ist wesentlich als Erkennen, es ist ein Proceß, dessen Momente selbst absolut dieser Lebensproceß ist. Die Momente des Processes sind unendliche Bestimmtheiten, oder einzelne Leben, Lebendige” (GW 7: 181).

negatively in the form of an ‘other’.²⁸ From this starting point, the dialectic develops the living individual itself as that which must be thought of as the actualization of the inner concept in terms of it constituting some sort of external locus (in the section numbered “1”). The philosopher chooses a term for this localized, living whole: it is the “objectivity” of the living thing as “organism” (GW 12: 184), which is “the means and instrument of purpose”.²⁹ Thus, one can see organism simply as the name given to the logical category of the most fundamental *vessel* of life’s inner soul.

The process of the logical organism is of being pushed back into itself as the immediate mode of systematic realization of the self-determining, processual whole. The section numbered “2” explores the process that the organism enters into with itself as not only a self-determined whole, but as one that is going through changes in so far as it is *simultaneously* internally determined and externally variable. The first and the second sections detail the logical unfolding of the organism with an eye to its immanent development and initial processual exchange with its surface, so-to-speak, facing the environment. Finally, in the section numbered “3”, focus shifts to the “living *objectivity*”, which is then run through the three moments of the concept, thus yielding, “sensibility” as its moment of universality,³⁰ “irritability” as its moment of particularity,³¹ and

²⁸ See, e. g., the point where Hegel differentiates between the current treatment of the relation between concept and reality and that which came in the form of teleology in which there was a unity “in so far as the concept has gone over into reality and is lost in it” (GW 12:183). In life, by contrast, the objectivity itself “has proceeded only from the concept, so that its essence is positedness [*Gesetzsein*], or that it exists as *negative*” (GW 12:183). Thus, there is a direct *setting* of the concept in an objectivity that is for it an immediate other, i. e., a *negative* moment in that it is not yet revealed as immanent to it.

²⁹ Similarly, Kant states how such a thing as an organism must be thought reflectively in judgment in the *Critique of the Power of Judgment*: “In such a product of nature each part is conceived as if it exists only *through* all the others, thus as if existing *for the sake of the others* an *on account of* the whole, i. e., as an instrument (organ), which is, however, not sufficient [...]; rather it must be thought of as an organ that *produces* other parts [...]: only then and on that account can such a product, as an *organized* and *self-organizing* being, be called a *natural end*” (AA V: 373–374). For a description even closer to Hegel’s, which, of course, Hegel would not have had access to, see Kant’s *Opus Postumum*: “Organism is the form of a body regarded as a machine – i. e. as an instrument (*instrumentum*) of motion for a certain purpose” (AA XXI: 185). It should also be noted in light of what was just discussed regarding Hegel’s use of language that Kant, in the first reference from third critique, is drawing on the etymology of organism as such, namely, from *organon* (ὄργανον) which means ‘tool’ or ‘instrument’ in Greek.

³⁰ *Logically*, this determination of the concept is based on the form of the universal taken up from outside itself, i. e., being left as a ‘simple immediacy’ that remains a general impression without specific difference all its own; it is just taken up within the living individual, but left abstract.

³¹ *Logically*, this is the determination of the concept in externality as the ‘posited difference’ between the living, receptive individual and a foreign externality with which it finds difference. An approximate term for the tension between a object and something alien affecting it is ‘irritation’.

“reproduction” as its moment of singularity.³² These moments can be thought of, in turn, as the further objective development of an organism via its immediate relation to an external other (the universal moment of ‘sensibility’), its mediated tension or difference with the other (the particular moment of ‘irritability’), and its fully reflected self-discovery, its coming to be *for itself*, after interaction with the other (the singular moment of ‘reproduction’). Logically speaking, one could paraphrase all these developmental stages as a description of the concept (qua inner purposiveness) in its first encounters and mediations with that which is initially external to it, but which, qua system, must be incorporated into its logical DNA as necessary parts following from itself as whole.

Moving onto “B. The Life Process”, one can say that here the processual movement of the concept and its corresponding objectivity continues, but now in the spaces between the living individual and the other that has taken on substantial shape as a substrate with which it must contend. The individual has a “certainty of the intrinsic nullity of the otherness confronting it” (GW 12: 187). This leads through moments of interaction with the vacuous other in various forms in which the “need” for the other creates tensions that erupt in “pain” once the concept has found itself “split into two” from its finding itself both in itself but also in the other as that which it needs to incorporate into itself (s. GW 12: 187–188). This is a moment in which the individual finds itself in contradiction with itself as self-determined, but also engaged necessarily in conceptual otherness.³³ The living individual learns that it can effect objectivity – it can both be “excited” by it and enact change within it so as to find that objectivity “*accords with it [entsprechend findet]*” (GW 12: 188). In reaching into objectivity, the living individual can enact significant change via incorporation of objectivity into its own purpose, i. e., what the philosopher names the category of “violence” in the life-process (GW 12: 188). However, in this process of reaching out, of “assimilation”, one finds oneself returned to the moment in “A. The Living Individual” in which its reflection into itself is a form of “reproduction” (GW 12: 189). This

³² Logically, this is the determination of the concept in externality in so far as the combination of sensibility and irritability contribute towards interplay between the living individual as itself a process, as well as faced with a general negativity (i. e., otherness) outside itself. In this confrontation with externality, it comes to a “Reflexion-in-sich” (which Giovanni translates as “immanent reflection”, (GW 12: 186)), i. e., a moment in which it sees itself in a twofold manner. This mediated reflection conceptually abolishes the immediacy found at the beginning of the living individual in two manners. First: theoretically, the conceptual movement shows the sensibly given to be nothing else than a “feeling”, i. e., something fleeting, caused by that which the living individual is not. Second: in a real sense, it comes to realize that this negative otherness is part of a “unity of the concept in its external objectivity” (GW 12: 186). The individual finds itself in the other – this is a sort of reproduction of oneself in reflection.

³³ Cf. Düsing: “[Das lebendige Individuum] findet sich als negativ bestimmt, und es negiert jene Welt und ist dadurch positiv identisch mit sich” (Düsing 1986, 286).

time, however, the reflection is not internal to itself; instead, it sets itself outside itself in the objectivity in which it is interactive – the world has become a mirror for itself. It is a mirror, however, in a substantial sense. It is not only an image of itself out in externality, but an actually effected and filled space with itself as a shaping force: “Through the external life-process, [individual life] has consequently posited itself as real universal life, as *genus*” (GW 12: 189). Thus, the logic finds the living individual not only as universally aware of itself qua a systematic whole; no, it has also grown into an awareness that encompasses itself as constituting a systematic whole (a universal) of an individual enmeshed in the objectivity surrounding itself. In this, it has reached a new level of systematicity drawing in that whole in which it evolves and which it partially constitutes.

We have now come to *genus*, or *Gattung*. It is important to remember the process-notion of the stages of life because I believe this accounts for why McTaggart’s objection is itself off the mark. Indeed, I think that it demonstrates McTaggart himself being misled by the word ‘genus’ and certain lines of “C. The Genus”. But first, let us see what McTaggart claims to be problematic. Essentially, he claims that Hegel is using *Gattung* in a “quite unjustified” way (McTaggart 1910, 281). This is due to a sort of fallacy of equivocation. McTaggart sees *two* forms of universal in use: the first form has to do with a necessary dependence of the particular organism on its environment. This universal built between the organism and its environment is what McTaggart has made out of the dialectic of “B. The Life-Process”. The second form has to do with the rank of species (or kind) as a category in comparison with the individuals that constitute it. This is the universal that is born from the comparison of many living individuals to find commonalities that make them of the same class. The first form, according to McTaggart, is a universal in the objective sense as a “unity of a System, a Universal which belongs to and unites certain differentiations” (McTaggart 1910, 281). He, in turn, refers to this as a “System-Universal”. The second form “denotes a group of qualities which may be [...] shared by many beings” (McTaggart 1910, 281). This weaker sense of universal he refers to as a “Class-Universal”. The key to understanding the difference, as McTaggart sees it, is that in one sense the universal depends on the objective manifestation of an actual, so-to-speak, breathing system, whereas in the second, the grouping of qualities could continue to exist even if there were only one, e. g., living lion left to instantiate its concept qua ‘lion’.

McTaggart asserts that the logic should now employ *only* system-universals but that Hegel is, in fact, employing a class-universal in *genus*, which “he has demonstrated to be defective for the higher conception which had transcended the defect” (McTaggart 1910, 282). In short, McTaggart accuses Hegel of introducing a mongrel conception of universality which accounts for the biological use of the term *Gattung*, as a way of classing organisms due to specific qualities and at the

same time tries to retain as a *Gattung*₂ that which represents a realized system of organisms that transcends their dying off by remaining somehow set above them. McTaggart thinks Hegel needs the first class-universal when accounting for how the “duplication of the individual” is “a relating of the living being to itself as to another living being” (GW 12: 190). Simultaneously, however, McTaggart points out that Hegel needs the system-universal. This need arises from the inadequacy of life that necessitates the transition to cognition, a need that depends on the organism having to die off, i. e., its being inadequate to the concept of its *genus*. The problem is, therefore, that the inadequacy which life needs and supposedly encounters, is *only* to be found on the side of the animals dying off in a bad infinity entailed by the system-universal. The class-universal, though, which seems to characterize *genus* in general cannot effect this transition.

The reason I think that McTaggart is misled here by biological analogies is because there is no indication that Hegel in fact does let his category of thought be taken hostage by a notion of a class-universal derived from the word *genus* as typically associated with classes of animals. Instead, we expect from Hegel, as already pointed, that his choice of words gives objective shape to an already determined thought. Thus, any associations of *genus* consisting in many animals forming a species due to shared qualities are one’s own. They are projected when one assumes that Hegel is reneging on his promise from the introduction. However, I have already addressed how an appropriate understanding of his use of language diverts such a criticism, as well as all grounds for the assumption. For this reason, from now on I will leave it in the German of *Gattung* so that even the temptation is taken away.

Even if one remains skeptical by pointing to the thoughts undergirding the words as being somehow indicative of a class-universal, I think that such an approach leaves the section underdetermined. There is a sense in which a class-universal is accounted for by the dialectic, but not exclusively so. In fact, I think that when one examines Hegel’s use of *Gattung* it cannot be concluded to be solely a class-universal without leaving critical moments of the dialectic out. Besides finding oneself qualitatively “duplicated” in the system as a whole, Hegel speaks of the “truth” of life in *Gattung* constituting a “*subsisting*” (GW 12: 190). And this involves both the external “*propagation*” (GW 12: 191) along with the returning back to itself that is a “*universality of the idea as it becomes for itself*” (GW 12: 191; transl. altered).³⁴ Subsisting, propagation in a larger system, and

³⁴ I have altered this translation because I find it a tad misleading. The original German is *Gattung* as “*die für sich werdende Allgemeinheit der Idee*” (GW 12: 191). In this wording there is no talk that directly calls for the translation of “coming to be explicit”, which sounds suspiciously Brandomian. Instead, there is simply talk of the living individual becoming (*werdende* from *Werden*) universal for itself (*für sich*) as idea.

discovering itself as a universal in the process of becoming, I find to overflow the capacities of a simple class-universal. Instead, they indicate a system-universal that requires special unpacking.

Translating *Gattung* breeds trouble.³⁵ Ultimately, I think that translation here is impossible. Impossible because Hegel, I believe, chose *Gattung* precisely due to its multiple meanings.³⁶ That is to say, there really is no specific translation

³⁵ As a historical reference, Sell unpacks the concept of *Gattung* thoroughly as it arises in Hegel's oeuvre. In particular, she points out Hegel's first passes at developing it in the Jena *Systementwürfe* from 1803/04, 1804/05, and 1805/06. At this time, though, Hegel is still working with the notion of logic and nature developing parallel to each other. Nevertheless, one can extract the basic notion, which Sell describes as follows: "Die Gattung bezeichnet stets ein Allgemeines, das aus verschiedenen Arten und Einzelnen besteht. Zugleich bildet sie die Einheit dieses Allgemeinen und Einzelnen" (Sell 2013, 44). Of further value, she points to Hegel's adoption of the term from Plato out of his *Lectures on the History of Philosophy*, where he translates Plato's term, *eidos* as "Gattung" or "Art" (Sell 2013, 44). She points out that *Gattung* is of particular value in unifying the domains of life and logic because it represents a "Schnittmenge" between the two in so far as it can be employed in logic and in natural philosophy (Sell 2013, 50). Kreines also discusses the difficulties in translating *Gattung*: "The requirements of the analysis [of life] alone fix the meaning of *Gattung* here: it refers to a general kind within which individuals reproduce, generating more individuals of the same kind" (Kreines 2014, 357). Consequently, Kreines prefers "species" as a translation since, otherwise, "Hegel's term *Gattung* – usually translated as 'genus' – can seem to suggest the idea that there is a perfect hierarchical classification system defined by clear necessary and sufficient conditions for different categories" (Kreines 2014, 357). Kreines stresses, though, that this interpretation is not required by Hegel's analysis. I remain skeptical that translating it as 'species' is enough of an improvement to avoid confusions.

³⁶ When one looks up *Gattung* in the *Deutsches Wörterbuch* compiled by Jacob Grimm und Wilhelm Grimm one finds a list of meanings as long as the "Gattung" chapter in Hegel's *Logic* itself. First, it can be a substantive noun referring to the process of reproduction. Second, it can refer to "people or things that simply belong together [*zusammengehören*]" (my transl.). Third and closely related to the notion of 'species', it can also mean a passing into an abstraction from individuals of a common species ["in das abstracte *art* übergehend"]. And finally, it can be used as a manner of speaking about *how* things are [i. e., how things are given via a certain "*art und weise*"]. It should further be noted that under each of these general definitions, multiple sub-definitions are listed that carry with them varied usages of these major ones. Important for our purposes is the explicit mention of a usage by Kant under the notion of *Gattung* as an abstraction passing from the individual members [*arten*] to a specific concept, "where thus the *Gattung*, which originally is the living or actual [*lebende oder wirkliche*] entirety [*gesamtheit*] itself, is shrunken down to a concept [*begriffe*]" (my transl. of: "wo denn die gattung, ursprünglich die lebende oder wirkliche gesamtheit selber, zu einem begriffe zusammengeschrumpft ist"). Though the terminology seems incredibly aligned with Hegel's, one must keep in mind that all of the connotations could justifiably be said to be at work in different senses during the dialectic of *Gattung*. There is a sense of the sexual act with Hegel's reference to different sexes [*Geschlechter*]; also, there is a sense of things belonging together, in that the *Gattung* is called "the identity of individual self-feeling in such a one who is at the same time another self-subsistent individual" (GW 12: 190). Or one could see even a strong sense of the *way* of appearing or being, i. e., a thing's *Art und Weise*, in that *Gattung* as "germ of the living being [...] is where all the living being's diverse sides, its properties and articulated differences, are contained in their *entire determinateness*" (GW 12: 191). Thus, it seems like Hegel is consciously exploiting the multi-faceted nature of the term *Gattung* itself to describe the many facets of systematic whole at this stage. The language giving determinant shape *shows* the interwoven nature of our concepts with different senses.

of *Gattung* required by his analysis when taken in a strictly logical sense. Indeed, the very ambiguity contained in the concept of *Gattung* speaks to multiple levels that seem to be at play here without belonging to any one meaning. As a result, it is a word that due to its flexibility can accommodate more than one meaning and therefore avoid the issue of underdetermination that the class-universal runs into. If this is the case, then one misunderstands Hegel completely by nailing down his use of *universality* qua *Gattung* as having only one sense. This would be to isolate but one side of conceptual evolution in action that, as one-sided, would be for Hegel untrue.

In brief summary, I feel like a strong case has been made for (a) how logical life can be thought and (b) how this continues through the dialectic of life. With this work done, it is my hope that a pure, logical reading becomes more appealing. Let us try for now to bracket off all connections with what we understand under biological species or genus. The purity of the logical movement here demands a suspension of this thought in order to see what exactly is going on in the eventual transition.

II. Life in Transition

C. The Transition from *Gattung* to Cognition

Now, I set myself to purpose in describing the logical development in the pure space of the “*Gattung*” section and its eventual culmination as a transition to the next category of the idea, namely, cognition. Occasionally, I will leave logical space for a breather in order to check our progress. The first section reconstructs the development of *Gattung* up until the transition point (1.); the second section does the same for the transition itself (2.); finally, I conclude with a discussion of why cognition follows from this transition (3.).

1. The Development of Gattung

Where we left off above at “B. The Life-Process”, the living individual, qua logical locus in a process of *immediate* self-relation, is related (as part of a more general totality) to an external, objective sphere in which its interactions constitute a process that makes-up a *mediated* self-relation. This mediated process is interwoven with the objective sphere where the individual encounters opposition – *otherness*. This otherness is, in turn, the means by which the individual *becomes* what it is; it is both a becoming real (corresponding to life as a form of things) and a recognizing itself in the process of realization (corresponding to

the same development taken up as a form of thought).³⁷ Taken together, the individual, in the totality of its development, finds the other as necessarily part of its conceptual identity qua processual whole. This identity with the other, which originally was postulated as “indifferent to it” (GW 12: 189), opens the sphere of *Gattung*. The living individual becomes, so to speak, confronted (*for itself*) with its development as a totality.³⁸ The dialectic of life has ascended to a height from which it is possible to form a ‘big picture’ conception of its process as a whole. This big picture category is of two interdependent totalities (first, the particulars being generated to become universal, and, second, the universal striving via its becoming particular). Life, then, after the life-process stage comes to a ‘universal’ version of itself as a whole system of living individuals in which they realize themselves. The logic has become a self-constituting, processual whole, a whole of active parts at work for the sake of the whole.

This process of the individual raised up to a process engaged with otherness, which thereby *loses* its otherness, is what is going on in the first circling pass at defining *Gattung*: “[I]t [*Gattung*] is, identity of itself with its hitherto indifferent otherness” (GW 12: 190). What I described above as the process in which the individual develops to find itself as interwoven with otherness is described in Hegelian terms here as “particularization” (GW 12: 190). In a word, it is the process of making itself distinct by differentiation from and annihilation of the objective sphere. But when this time slice of particularization is taken up into a big picture conception of what the individual *is*, i. e., not as a single moment, but as a moment of the entire individual qua developing whole, then: “This particularization [...] in keeping with the totality from which it proceeds, is the duplication of the individual – the presupposing of *an objectivity which is identical with it*, and a relating of the living being to itself *as to another living being*” (GW 12: 190; my emphases). The living individual is no longer pushed back into itself. Instead, it has grasped into the world and found itself entangled therein.

³⁷ Cf. Hegel (V 16: 162): “Der Organismus ist nach seinem Begriff wesentlich Prozeß, Leben, Dialektik, Bewegung. Die Glieder sind nur Momente der einen subjektiven Einheit.” Although this reference comes from Hegel’s philosophy of nature, it illustrates well the notion of the category of life after this ‘becoming real’ has been set under the conditions of space and time.

³⁸ Taylor, by contrast, seems to see the crucial move as embedded first and foremost in the carnal production of oneself by which one becomes a “substantial universal”: “Thus the living individual comes to produce himself, to cancel the ‘presupposition’ of an inorganic opposite him and incorporate it in himself. In doing this he becomes substantial universal, what Hegel calls ‘*Gattung*’ (genus). This means that he undergoes another kind of sundering, now into two individuals” (Taylor 1975, 333). However, this only works with the presupposition of biological analogies leading the charge, the copulation somehow creating a ‘substantial universal’ that also, by biological fiat, sunders itself into two individuals. Taylor’s reading takes a line of approach that from the beginning understands Hegel to be thinking here explicitly of ‘animals’. Even if Taylor claimed that the logic was still leading, it would remain difficult to keep the category universally applicable.

In reflection now, it sees that its identity is bound up with its interactions. Indeed, when stepping back, the logic grasps the individual *as if* it were another or many others that co-constitute the whole. The logic can, as it were, abstract away from the living individual as part of a larger logical system and adopt a view from nowhere.³⁹ In turn, this supplies the logical form for recognizing the other as the same as oneself – for it prepares the ground for the step of thinking of oneself in a concrete manner.⁴⁰ Here, the most basic logical unit of the big picture receives conceptual determination as one of the many (logically similar) units in the same process.

Leaving logical space for a quick breath of real air, this logical category could be seen as an answer to the ship of Theseus paradox.⁴¹ This phase in the category of life is a category of *reason* and captures an identity by not stopping with the conceptual identity of something (take, e. g., a *ship*), or with the objective identity of it (not just any ship, but *this* particular ship). Nor does it stop by taking *this ship* at some particular time x and place y to be a full expression of its identity. It follows that *this ship* will not be more fully determinable due to one constitution of itself (say, at time x and place y) in opposition to another constitution of itself (say, now at time u and place z). Instead, one finds the ship's true and full identity in reflecting on its process as a whole, regardless of the time, place, and constitution that presently realize its being. Thus, at the level of reason that can

³⁹ Thomas Nagel in *The View from Nowhere* plays a variation on this same theme with his notion of the “objective self”, which is a notion of self that “might just as well view the world from the perspective of a different person” (Nagel 1986, 60). Though Nagel employs it for different purposes (e. g., in connection with questions in the philosophy of mind, ethics, and natural science), the general notion illustrates precisely what I take Hegel to be trying for here in logical space. In Nagel's language, once one has tapped into this notion of a view from nowhere, one can then begin to progress: “Next comes the step of conceiving from outside all the points of view and experiences of that person and others of his species, and considering the world as a place in which these phenomena are produced by interaction between these beings and other things” (Nagel 1986, 63).

⁴⁰ Düsing might reject this view of the ‘reality of the idea’ due to his reading that depends on assuming that Hegel is being led by biological analogies (namely animals): “Jedes macht in seiner Beziehung auf das andere die Erfahrung, daß sein Gegenüber nicht gleichgültige äußere Objektivität, sondern ein lebendiges Individuum der gleichen Art ist. Diese wechselseitige Beziehung aufeinander als gleichgültiger Lebendiger wird empfunden” (Düsing 1986, 286). Thus, ‘Gattung’ for him arises out of recognition in the formerly ‘indifferent’ world (*Anderssein*) that there are forms that are the same type as myself, my species. However, Hegel's passage only seems to imply this reading if one has already begun with the presupposition that Hegel is actually letting nature guide his thinking.

⁴¹ To honor the classic example I talk about the ship – however it would perhaps be more enlightening to substitute in the identity of a living being, such as ‘person’ or ‘oak tree’. The same holds true for these, or rivers, or whatever other processual identity one wants to substitute. Indeed, the ontological generality of *Gattung* lends itself in application to any conceivable object. For even objects that are ‘dead’, like rocks, lamps, and televisions, become alive when conceptualized. The concept in grasping them must view them as wholes in the process of change.

grasp the identity stretching over the whole process, it is the same ship through it all. Though inorganic, one must employ the logical category of *Gattung* on the ship to grasp it as an object with all its determinations – not as static, but as an object whose conceptual determinations evolve as if it were alive.⁴² Further, this understanding of its identity extends one's knowledge of what it means to be an object of its *Gattung* generally, i. e., applies to the identity of every other ship that belongs to the same processual arc. However, if taken up by the discursive *understanding*, which functions by separation and comparison, then the ship will *seem* to be a different ship depending on when and where one examines it.⁴³ After replacement of some of its planks, a sail, and the steering wheel, it is a different ship than it was before. However, in Hegel's system such a perspective offers an impoverished picture of truth.

Back to the pure logical sphere: the individual is now universal in a qualified sense. The big picture of itself is only *for* it. There is an open circuit in which logical life is *self*-realizing. The individual has, one could say, objectified itself. Not only does this mean realizing one's own potential – it also means taking up oneself as the concretion of one's fulfilled progress. Thinking here is taking up what the individual should be and is, mixing into what the individual is all the universal determinations under which it falls due to its process of realization.⁴⁴ This stage of universality in which the individual is part of a systematic totality is what one can call its "*subsisting*" (GW 12: 190). As long as life is stuck in this loop, however, it is, in a sense, stagnant, frozen, and caught within a static image of itself that cannot be adequate to the idea – because the central aspect of the idea is *process*, which implies *movement*. Thus, it is only a partial truth of life that has been reached by this stage of universality – it is its truth "in so far

⁴² This thought connects and is inspired by the work of Rolf-Peter Horstmann in *Wahrheit aus dem Begriff. Eine Einführung in Hegel*, in which he describes Hegel's concept of an object as 'organologisch'. This stands in contrast to a mechanistic object conception à la Kant whose categories of the understanding discursively analyze objects into their parts. Our knowledge claims about organisms being teleologically-driven wholes remain consequently non-objective since it is only our reflective and not our constitutive power of judging that apprehends them. For Hegel, however: "Objekte in Wahrheit erkennen, heißt ihren Begriff erkennen, denn das, was Objekt in Wahrheit ist, ist sein Begriff. Außerdem ist nur das in Wahrheit Objekt, was man nicht als Mechanismus denken muß, sondern was organologisch als Einheit inkompatibler Bestimmungen oder als organismusartig gedacht werden kann" (Horstmann 1990, 55).

⁴³ Cf. again Hegel (V 16: 140) „In dem Begriff des Organismus verschwindet nun der Verstand, denn dieser trennt und bezieht nur. Und der Organismus widerspricht am meisten dem Verstand. Alle Verstandesformen verschwinden, z.B. die Form von Zusammensetzung, von Ganzem und Teilen. [...] Aber eben der Anatom betrachtet ja nur das Tote, nicht das Leben. Sie haben nur Teile in ihrer Hand. Es fehlt leider das geistige Band". Just so, the understanding will fail to grasp the ship if it simply looks to the parts.

⁴⁴ "This stage is the process of the individual as it refers to itself, where the externality is the individual's immanent moment and is, [second], itself a living totality, an objectivity which for the individual is the individual itself" (GW 12: 190; transl. altered).

as life is still shut up within itself” (GW 12: 190), albeit with a view of the big picture in which it is processually involved. At this point, one is still caught up in the process from the side of the first moment of the particular trying to become its universal. That is, the individual is still in the process of completing itself without an appreciation of what external conditions must be in place for this to happen.

Out of this tension, an apparent contradiction arises. For the individual is at one and the same time “another self-subsistent [*lebendiges*] individual” (GW 12: 190). From a view from nowhere, the living individual is both identical to this stagnant picture of itself and different since it also not *yet* this whole. This contradiction, however, is only real for the understanding and not for reason. Consequently, this contradiction is a contradiction in only one sense. If reason is employed to account for the simultaneity of identity and difference, the contradiction is overcome by seeing both as only moments of the processual whole.⁴⁵

Thus, there is but a temporary inadequacy. Since inadequacy indicates a moment in which what should be a totality is in some way not that totality (i. e., a lack of correspondence between its concept and its reality), the individual is drawn towards realizing its big picture conception. It gains “*impulse*” (GW 12: 190), or *Trieb*. Set in the context of the big picture analogy, the individual moves towards the completion of itself as this big picture, i. e., every essential property and moment of itself, known and unknown. Yet it is also *different* from this complete set of moments and properties of itself. For *within* the process it is not complete. In other words, the big picture of itself as a processual whole and part of a systematic movement that transcends itself requires that the individual exert

⁴⁵ Note, that the other self-subsistent individual introduces the importance of the individual recognizing a connection with other living individuals. Since the processual picture is formal, the contradiction is not a personal one, but an objectively general one shared by all individuals. Otherness – whether in the individual itself or other individuals – brings about the contradiction that the individual is experiencing. It is my hope that I am not taken as treating the process of *Gattung* as some lonely enterprise by some single-celled organism of Hegelian logic. Whenever I speak of the ‘individual’, I could mean any individual in this process. See also the introduction of my conception of *Gattung* above as the big picture of a ‘whole system of living individuals’. Many earlier drafts of this notion demonstrate too that Hegel had a notion of a process indicative of multiple individuals, e. g., see § 91 in Hegel (GW 10,1: 301): “Der Proceß der Erhaltung der Gattung ist das Verhältniß des Organischen zu dem ihm gleichen Organischen, wodurch es sich als ein andres Individuum der selben Gattung reproducirt. Die Gattung stellt sich in diesem Wechsel der Individuen als ihre Macht und den Rückgang der Einzelheit zur Allgemeinheit dar”. Cf. again Hegel (V 16: 179), albeit in the form of *Gattung* by animals post logic under the conditions of time and space: “Das Tier ist der Trieb dieser seiner Gattung, sich als Gattung anzuschauen. Aber in der Natur kommt es nur dazu, dass es die Empfindung seiner nur hat in dem Anderen seiner Art. Das Andere ist dasselbe, was es ist, und darin empfindet es sich. Sie bleiben aber dabei Selbständige, wo sie nur füreinander sind als Einzelne”.

itself to become more of that which it should be. What it must become is the whole in which it strives.⁴⁶

This “drive” after finding itself as an objective totality, becomes a return to its direct process that, as “inner or subjective”, becomes a “longing” [*ein Verlangen*] to “realize itself as universal” (GW 12: 190). This marks the beginning of a shift within the big picture. An individual, formerly but a vessel concerned with its own development, requires for its fullest level of completion a place within the whole in which it is embedded. However, the individual (and all individuals that are formally identical to it) does not stand in simple relation to this whole. Instead, it is simultaneously constitutive of it and constituted by it.⁴⁷ In the development, the logic now takes up the whole as its object. The totality of that which makes the individual what it is, as self-referring, is set in its universal side, in the side of completed, processual movement. One could say that the system as the whole contains a certain impetus towards a certain stage since any partial moment is always pointing ahead towards the collection of moments in which alone it can find thoroughgoing determination.⁴⁸ There is a sense now, when taken in its full universal dimension, that the completion of the process is the deciding factor as to how the individual develops. Hegel sees here the manner in which the initial stage of the universal *being for* the individual has shifted to the universal *as such* being *for itself*. The main point is that the totality of the living individual points towards its unified totality as a processual whole. This whole is its development.⁴⁹ One could say the individual presupposes the whole (the

⁴⁶ Kreines’ reading, I find quite spot on here when it comes to clarifying the determining role that *Gattung* plays as the universal driving the individuals within its system: “But we must not take this to mean that ‘the concept’ is supposed to be like an additional thing bumping up against the other elements here. [...] The point is rather, first that whatever is going on with the lower-level stuff, all of it is present specifically on account of the way in which it contributes to the end of the development of a mature organism capable of self-preservation and reproduction. And, second, the end of the process of development can explain that very process specifically insofar as there is an explanatory role here for something general – for the species or kind [*Gattung*] or ‘the concept’ [*der Begriff*] in this sense: each stage of development occurs here as it does specifically *because of the general species*, and more specifically because of the way in which this general kind of stage has consequences which benefit the end of the development of organisms of the same general kind or species” (Kreines 2014, 368–369; my emphasis).

⁴⁷ This category (under the conditions of space and time) undergirds why we must think of a skin cell as both pushing the organism’s development, while also being in a sense developed by the organism. One could also say the same for any part of a whole: the second hand of a clock is only a second hand in relation to the clock of which it is part, and the clock only exists thanks to its constituting elements of which the second hand is one.

⁴⁸ “[T]his impulse of the [*Gattung*] can realize itself only through the sublation of the singular individualities which are still particular to each other” (GW 12: 190).

⁴⁹ Cf. Hegel’s *Oberklasse Philosophische Enzyklopädie: Subjektive Logik* (1809/10) for a succinct phrasing of this along similar lines in § 84: “Das Leben ist [...] ein solches Ganzes, in welchem die Theile nichts für sich, sondern durchs Ganze und im Ganzen und das Ganze eben so sehr durch

world, the processual system) in which its development leads and in which its origin is firmly rooted.⁵⁰

2. *Moving from Life to Cognition*

One must look at this transition carefully. The transition is the result of a process consisting in the two movements explored up until this point, the two sides of *Gattung*. One side is the particular moving to become its universal; the other side is the universal moving through the particular (as the totality self-realizing itself).

The major transition begins from the development thus far. We are at the point where *Gattung* itself could be said to speak through the individual. In the process of self-realization it ‘dissolves’ aspects of itself only to make way for new aspects. Aging necessitates a dissolving of one’s youth; to move to a completed argument, one must dissolve the status of an argument consisting in just a major premise by adding a minor premise and then a conclusion. And yet, what is added in conceptual development is no less a part of the initial individual.⁵¹ The individual moves to overcome the difference between its current state in

die Theile ist. Es ist ein *organisches System*” (GW 10,1: 298; my emphasis). Again, at this point Hegel has not yet begun his logical project and, therefore, one does not find the same calls for purity. One does, though, see Hegel’s thinking take shape in regards to some elements that take mature form in the *Logic*.

⁵⁰ It may seem here as though Hegel wants to claim that *Gattung* remains real over and above the individual, thus revealing him as an epigenetic theorist. In the words of Düsing: “Beim animalischen Lebendigen, an das Hegel auch hier wieder vor allem denkt, wird die Gattung als das Allgemeine aber nicht in den Individuen selbst real; sie gewinnt vielmehr nur eine unmittelbare Existenz im erzeugten lebendigen Individuum und des weiteren in der Geschlechterfolge in einem Progreß ins Unendliche. Hegel zeigt sich hier als Anhänger der Theorie der Epigenesis, nach der das Lebendige sich real fortpflanzt und grundlegend produktiv ist” (Düsing 1986, 287). Here, Düsing sees Hegel as propounding a theory that places developmental drive in the real process of the individual in growing, reproducing, and so on *ad infinitum*. The question is how this squares with *logical* life and whether, again, such a claim predisposes us to read into the logic a biologically influenced agenda. Though arguably correct regarding Hegel’s views at the time on nature, I find the real drive to be the evolution of the concepts as necessarily bound up with ones that they were not initially aware of needing. In support of this view as well, Kreines thinks one need not see in life an ‘epigenetic’ agenda driving the development: “Instead, Hegel argues that whether or not the structure of the whole depends on the parts, in the sense required for inner purposiveness, need not have anything at all to do directly with the capacities specific to the lowest-level underlying constituent stuff or matter” (Kreines 2014, 361). Sense can be made of the salient relations without needing to dig around in the matter for explanations – the logic at this point is in the offing, and that is enough.

⁵¹ Hegel writes: “At first, in so far as it is these individualities which, *in themselves* universal, themselves satisfy the tension of their longing and dissolve themselves into the universality of their [*Gattung*], their realized identity is the negative unity of the genus reflecting itself into itself out of its rupture” (GW 12: 190).

order to fulfill its role within the whole that is its process. At this stage, *Gattung* is “the negative unity [...] reflecting itself into itself out of its rupture [*Entzweiung*]” (GW 12: 190). In the identification of the individual with its universal, the universal is not fully in line with itself as it is realized in the inadequate state of the individual. This ‘negative’ unity of *Gattung*’s identity being both united with the different other (first negation) and in setting itself in opposition to this otherness (second negation, i. e., reflectively seeing itself as *not* the other) – is what Hegel means with *Gattung*’s relation to itself arising out of the ‘rupture’.

This search of the concept (as, now, idea) for itself in the individual marks the beginning of the transition to cognition. Grasping a system requires more than an exploration of its parts – rather the system, qua system, can only be understood with a sufficiently broad examination of the many parts, their interactions, and the movement of the whole. The shift occurs when the *Logic* arrives at a point where the conceptual development of the moving whole becomes an object of inquiry ‘for itself’. The movement of the process becomes an object for reflection, i. e., for a reflection that grasps not only the thoroughgoing determination of the living individuals, but also the necessity connecting them into a systematic whole. Hegel employs the notion of the idea becoming “actual” to denote this shift: “To this extent, it is the individuality of life itself, no longer generated out of its concept but out of the *actual* idea” (GW 12: 190). In this shift in emphasis, logical life ceases to be about individuals in moments of objective particularity. Instead, the whole takes priority as a unified totality of moments, whose necessity is set in reality by the logical movement itself.

Logical life is at a point where the ‘*actual* idea’ is taken up as the processual truth of the living individual. It requires that the individual find its truth not in some static moment along the trail of its progression, but in the complete determination of the change itself. It follows that the truth of the individual requires its own dissolving and change – a sort of death, if you will – but this dissolving and change of objective moments is replaced by its process on a larger scale than before. Thus, the concept when it is *actualized* becomes “*the germ of a living individual*” (GW 12: 190). This ‘germ’ [*Keim*] is further referred to as the “complete concretion of individuality: it is where all the living being’s diverse sides, its properties and articulated differences, are contained in their *entire determinateness*” (GW 12: 191). So when we think of a germ, we are equally thinking of the whole process, every single property and moment of it from the universal perspective, which *could* occur in actuality if the process is followed through to completion.

Further, *Gattung* (as *actual* idea) “obtains *actuality* through its reflection into itself, for the moment of negative unity and individuality is thereby *posited* in it” (GW 12: 191). Just as the logical individual posits itself in the big picture, the big picture (in reflection) posits itself in the individuality that it generates. In this placing or “*positing*” of itself into the world, as a generative force, the logical

drive of life now leads to “the *propagation* of the living species” (GW 12: 191). The original German is “die *Fortpflanzung* der lebenden Geschlechter”. Here one must remember the role of everyday language in the *Logic*. The thought is that in a self-generating whole the individuals’ actions give actuality to the big picture.⁵²

But just because it might now seem to be caught in a sort of bad infinity, due to its being trapped in relation to finitude, does not mean that *Gattung* (qua actual idea) has not achieved a “higher form of existence” (GW 12: 191). For by representing that each one of these finite realizations – taking shape within its structure – move towards *it* and it in turn finds its own process *in* them as self-referring, it as logical life (perhaps now with a capital “L”) is “in and for itself”, namely, a system that as a whole is about finding the truth of itself not as an isolated actual or abstract moment, but as the movement of the whole. As such, the concept is freed from any isolated moment or set of moments and taken up as the idea in communion with itself: “The elevation of the concept above life consists in this, that its reality is the concept-form [*Begriffsform*] liberated into universality” (GW 12: 192). In reaching this higher form of existence, the concept takes up itself in relation to these moments of reality as that which connects them and provides their necessary relation. This level of self-reference is the “idea that *relates itself to itself as idea*” (GW 12: 192). The idea focusing on itself, i. e., on its movement in every moment of the *logical* system, can now be understood as both its object of inquiry (qua life, the totality of all adequate determinations) and its subjective filling out of this object (i. e., as its moving conceptual reality). In this, it arrives via logical death to the “*Hervorgehen des Geistes*”, the “coming to be of spirit” (GW 12: 191), or the ‘going forth’ of it, as I might translate it.

3. *Cognition via Logical Death*

In sum, the truth of living individuals and their concrete system is not found in the objective anchoring itself, but in the conceptual *movement* of the process as it unifies all categories together and provides their necessary connection. The idea takes up now the whole logical system itself and reflectively examines the necessity it finds within it. One might say that life, as idea, leads to a meta-level of idea. In moving from change at the level of objective shapes to change at the level of thinking itself, one sees *Geist* progressing past its objective underpin-

⁵² “The idea, which as life is still in the form of immediacy, thus falls back into actuality, and its reflection is now only the *repetition and the infinite process* in which it does not step outside the finitude of its immediacy” (GW 12: 191; my emphases).

nings to undertake an examination of its own activity in unifying these shapes. This pure category of the logic taking up its own progress in reflection is what Hegel means by ‘cognition’. Hegel notes that the concept in logical life, “is indeed distinguished from its external reality and posited *for itself*” (GW 12: 192). Nevertheless, it cannot account for its full reality because it only has “being-for-itself” [...] “as an identity that refers to itself as immersed in the objectivity subjugated to it, or to itself as indwelling substantial form” (GW 12: 192). Yet the concept is that which is change itself, and thus, a logical death must free the concept of its objective trappings. Logical life then has its truth in the progression of spirit that now searches for itself in the forms taken up so far. It goes without saying that I take Hegel to be referring to a purely logical notion of death. Logical death is the end of movement at the level of the concept unified with objectivity. However, this end represents only a leaving behind of the system as contingent on objectivity; the movement now continues free of this limitation.

With this purely logical reading, the transition’s necessity becomes quite compelling. Indeed, logical life leads to logical cognition in the manner in which the systematic relation between concept and objectivity comes to find its necessity not in the objective shapes itself, but rather in the movement of thought weaving the shapes together. But what of a reading that takes logical life *not* to be an ontologically general category of a self-realizing, self-referring system, but rather a logical mirror of biological life? How could one understand the transition to cognition via an analogy to biological genus or species, or via some kind of orientation to animal procreation and death? Such a reading, I think, leaves one grasping at straws to understand *why* an analogy to the dying of a bad infinity of beasts (like and less like us) should lead to some transcendent move beyond death to the reflective category of cognition. If one lets biology take the role as the man behind the curtain, then two possible readings would seem to lead to either a banal or a supernatural reading. The banal reading is that death of oneself and our fellow finite beings leads us to think by analogy beyond this finitude into the good infinity of self-reflective thought (notice: this reading would also imply that Hegel further lets empirical psychology guide the pure development of the idea of cognition). The supernatural reading would be that in the death of the finite, immediate form, some transformation takes place by which self-reflective thought transcends the mortal plain and attains the higher regions of perfected thinking. I am unsure what to think of this interpretation since it departs so strongly from what I take Hegel to mean by logical.⁵³ Both

⁵³ Düsing offers the following description of the transition at death: “[Der Tod ist] die Aufhebung der natürlichen Unmittelbarkeit des Lebendigen und nach Hegel der logische Übergang zum Geist und zur geistigen, selbstbewußten Existenz. Die Vollendung des natürlichen Lebens ist also ein solches Über-sich-Hinausgehen” (Düsing 1986, 287). Here Düsing offers a variant of the

seem dead options from the start since they move from the contingent form of animality to a logical transition in a system that should stand free of any pre-suppositions.

After logical death and the progression of *Geist*, we are now in the sphere of the idea of cognition. Whereas life was a development of the concept qua idea, Hegel claims that cognition is the same idea as judgment: “Life is immediate idea, or the idea as its still internally unrealized *concept*. In its *judgment*, the idea is *cognition* in general” (GW 12: 192). Life, then, is that which cognition must separate out and set. Every singularity in the processual whole is now to be examined in its general, universal truth as *Gattung*, and reflectively posited in its necessary relation to objectivity. Although the idea of cognition is a topic unto itself, I would like to highlight in conclusion certain facets of it that further support a *pure* reading of logical life.

To begin, the necessity of a purely logical reading of life (and by implication, of cognition) is restated in the general introduction to “The Idea of Cognition”. Hegel writes regarding the relation between logical life and empirical appearances that, “empirical reality itself, however, can be grasped *only through and out of the idea*” (GW 12: 196; my emphasis and transl.).⁵⁴ Thus, one finds Hegel restating his commitment to keeping biological analogies or biological points of orientation out of sight and out of mind in the *Logic*. Moreover, Hegel’s re-confirmation of logical life’s priority is buttressed by Hegel’s repeated use of *Gattung* in section “b. Synthetic Cognition”. Far from referring to some sort of object with animal traits, he employs the term to refer to logical cognition of objects in general. This employment of *Gattung* onto the entire field of objectivity demands its simultaneous applicability to all objects of cognition without having to presuppose ones that are vegetative or animalistic.⁵⁵

transition that I did not offer, namely that there is a sense that the *completion* of a natural life is in some way a transcending over oneself. However, I am unsure how to evaluate what this is supposed to mean exactly, since I am unsure what completion of some natural life has to do with the birth of the concept of cognition. By contrast, I do think that there is a sense in which completion could be said to be a *conditio sine qua non* for nearing truth, albeit in a primarily logical sense. One could then apply this notion to the sphere of organic life.

⁵⁴ Hegel writes in reference to the idea of life: “das Empirische kann jedoch selbst auch nur durch und aus der Idee gefasst werden” (GW 12: 197). Surprisingly, the important qualification of ‘nur durch und aus’ is completely left out in di Giovanni’s translation, an omission which significantly alters the meaning. His translation states: “one may then also compare the empirical reality or the appearance of spirit to see how far it accords with it”.

⁵⁵ *Gattung* allows apprehension of an object by reducing the “richness” of the multiple determinations of its “concrete existence” to a universal by which one can then “apprehend” it (GW 12: 210). Through the rest of the section on synthetic cognition, *Gattung* resurfaces and can be seen at work as the identifying universal of those essential properties of an object which it should have to be adequate to its concept, or a ‘good’ exemplar of its *Gattung*. Indeed, Hegel even differentiates between *Gattung* and *Art* in reference to an object’s properties: “We have to determine, therefore,

Finally, logical life as a pure notion helps clarify the overall structure of cognition itself. The idea as judgment in cognition is not just a separation of a concept, but of the concept and its adequate forms in objectivity. Consequently, the object of cognition is the idea itself. This object–relation of the idea to itself, i. e., the idea taking itself as content, Hegel terms the idea as “doubled” (GW 12: 192). It is the idea separated out into a “subjective” side of the concept “whose reality is the concept itself” (GW 12: 192), and into its “objective” manifestations that are nothing other than the entire content of the *Logic* itself, i. e., the category of life. The subjective side is the reflective determination of the idea taking itself up as object. The objective side is its reflection set into the external forms of actuality as their reality. Out of this doubling, the two branches of cognition are born. The former refers to theoretical cognition, or the seeking of the truth “that only *seeks* it” (GW 12: 199). The latter refers to practical cognition, or the pursuit of the good, which from the freedom of the concept “passes over into its manifestation” (GW 12: 230). The idea as cognition takes up both cognition itself, as that seeking truth, and the necessity of the manifestations of the concept, as that willing the good.⁵⁶ A purely logical reading of life keeps clear where we are within cognition. Indeed, cognition demands an object infinitely rich in content. As such, only a general category with no specific domain of application satisfies the demands of Hegel’s speculative logic at the level of idea. Only when one takes life to be purely logical is it ontologically general enough to categorize all possible objects that the idea seeks to know and wills to manifest.

Abbreviations

- AA Immanuel Kant. *Gesammelte Schriften*. The Academy Edition of the Royal Prussian Academy of Sciences. Berlin, 1900 passim.
- AA V (*Kritik der praktischen Vernunft. Kritik der Urtheilskraft*); AA XXI (*Handschriftlicher Nachlaß. Opus postumum. Erste Hälfte*)

which of the many properties pertains to the [object] as genus, which as species” (GW 12: 212), further supporting a reading that takes ontological generality to be crucial for the idea. Later, in the section on “division”, Hegel states that *Gattung* is the “ground of division”, and that which is determined according to a grouping together of properties under a “principle of unity” (GW 12: 218). Logical life, in its pure form, sets the stage for understanding the conceptual movement of cognition in general whether that applies to physical, biological, or social systems.

⁵⁶ Here, new challenges arise in understanding how ‘the good’ remains purely logical. However, one need only remember the notion of ‘should’ associated with adequacy to understand at least one non-moral reading of it. Of course, just as with life, the good in the end should give form to the moral dimensions of experience under the conditions of time and space.

- GW Georg Wilhelm Friedrich Hegel. *Gesammelte Werke*. Edited by the Rhenish-Westphalian Academy of Sciences and the German Research Foundation (DFG). Hamburg, 1968 passim.
- GW 7 (*Jenaer Systementwürfe II*); GW 10,1 (*Nürnberger Gymnasialkurse und Gymnasialreden (1808–1816)*); GW 12 (*Wissenschaft der Logik. Zweiter Band. Die subjective Logik / The Science of Logic*. Translated by George di Giovanni. Cambridge, 2010); GW 20 (*Enzyklopädie der philosophischen Wissenschaften im Grundrisse (1830)*); GW 21 (*Wissenschaft der Logik. Erster Band. Die Lehre vom Sein (1832) / The Science of Logic*. Translated by George di Giovanni. Cambridge, 2010)
- V 16 Georg Wilhelm Friedrich Hegel. *Vorlesungen über die Philosophie der Natur. Berlin 1819/20. Nachgeschrieben von Johann Rudolf Ringier*. Vol. 16 of *Vorlesungen. Ausgewählte Nachschriften und Manuskripte*. Edited by Martin Bondeli und Hoo Nam Seelmann. Hamburg, 2002.

References

- Aristotle. 1984. *De Anima*. In: *The Complete Works of Aristotle*, edited by Jonathan Barnes, translated by J.A. Smith. Princeton NJ.
- Brown, John. 1788. *The elements of medicine; or, a translation of the Elementa medicinae Brunonis*. London.
- Dahlstrom, Daniel O. 1998. "Hegel's Appropriation of Kant's Account of Teleology in Nature". In: *Hegel and the Philosophy of Nature*, edited by Stephen Houlgate, 167–188. Albany NY.
- Darwin, Erasmus. [1794–1796] 1818. *Zoonomia, or, the laws of organic life*. Philadelphia PA.
- deVries, Willem. 1991. "The Dialectic of Teleology". *Philosophical Topics* 19,2: 51–71. Norman OK.
- Düsing, Klaus. 1986. „Die Idee des Lebens in Hegels Logik“. In: *Hegels Philosophie der Natur: Beziehungen zwischen empirischer und spekulativer Naturerkenntnis*, edited by Rolf-Peter Horstmann and Michael John Perty, 276–289. Stuttgart.
- Ferrini, Cinzia. 2009. "From Geological to Animal Nature in Hegel's Idea of Life". *Hegel-Studien* 44: 45–93. Hamburg.
- Gadamer, Hans-Georg. 1976. *Hegel's Dialectic: Five Hermeneutical Studies*. Translated by P. Christopher Smith. New Haven CT.
- Horstmann, Rolf-Peter. 1990. *Wahrheit aus dem Begriff. Eine Einführung in Hegel*. Frankfurt a. M.
- Houlgate, Stephen. 2006. *The Opening of Hegel's Logic*. West Lafayette IN.
- Kant, Immanuel. [1790] 2000. *Critique of the Power of Judgment*. Edited by Paul Guyer, translated by Paul Guyer and Eric Matthews. Cambridge.
- 1993. *Opus Postumum*. Edited by Eckart Förster. Translated by Eckart Förster and Michael Rosen. Cambridge.
- Koch, Anton Friedrich. 2014. *Die Evolution des logischen Raumes – Aufsätze zu Hegels Nichtstandard-Metaphysik*. Tübingen.

- Kreines, James. 2014. "The Logic of Life: Hegel's Philosophical Defense of Teleological Explanation of Living Beings". In: *The Cambridge Companion to Hegel and Nineteenth-Century Philosophy*, edited by Frederick C. Beiser, 344–377. Cambridge.
- Maker, William. 1998. "The Very Idea of the Idea of Nature". In: *Hegel and the Philosophy of Nature*, edited by Stephen Houlgate, 1–28. Albany NY.
- McTaggart, J.M.E. 1910. *A Commentary on Hegel's Logic*. Cambridge.
- Nagel, Thomas. 1986. *The View from Nowhere*. Oxford.
- Nicholson, Graeme. 2000. "Death on the Grand Scale". *Animus. A Philosophical Journal of Our Time* 5: 55–65.
- Sell, Annette. 2013. *Der lebendige Begriff: Leben und Logik bei G.W.F. Hegel*. Freiburg et al.
- Taylor, Charles. 1975. *Hegel*. Cambridge.
- Thompson, Michael. 2008. *Life and Action: Elementary Structures of Practice and Practical Thought*. Cambridge MA.
- von Haller, Albrecht. [1755] 1936. *A Dissertation on the Sensible and Irritable Parts of Animals*. Translated by M. Tissot. Baltimore MD.