

From Nature to Spirit in Hegel's Encyclopedia: Sex, Death, and Quantum Physics

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Abstract: This article investigates the transition from Nature to Spirit in Hegel's *Encyclopaedia*. First, I reconstruct the disagreement on the Nature-Spirit relation between readers of Hegel committed to Analytic neo-pragmatic naturalism and Continental speculative materialism, represented by Robert Pippin and Slavoj Žižek, respectively. Then, I turn to a debate internal to the materialist approach to Hegel, between Žižek and Adrian Johnston, regarding the best way to account for the development of Spirit out of Nature: either quantum physics or neuroscience. Next, I examine Hegel's views on sex and death at the end of the *Philosophy of Nature*, through which the transition is made to Spirit, in conversation with Žižek's critical readings of the same. Finally, I offer a new account of this transition in terms of Hegel's conception of 'decision' (*Entschluss*), whereby the animal organism makes the undecidable decision to break with Nature and become human, i.e. Spirit.

Keywords: Nature, Spirit, G. W. F. Hegel, sex, death, quantum physics

The precise relation between Nature and Spirit in Hegel's *Encyclopaedia* system remains a highly controversial issue in contemporary Hegel scholarship, on both sides of the so-called Analytic (Anglo-American) and Continental (French-German) philosophical divide.¹ Indeed, this relation is one of the key issues on which the opposition between Analytic and Continental readers of Hegel today turns, while also serving as an important point of dialogue and debate both between and within the two camps. The purpose of this article is to intervene in these debates by offering a new account of Hegel's Nature-Spirit distinction through an examination of the transition from Nature to Spirit in the *Encyclopaedia*, which takes place through the animal organism's experience of the contradiction or deadlock between sex and death.²

In §1, I reconstruct the disagreement on the Nature-Spirit relation between readers of Hegel committed to Analytic neo-pragmatic naturalism and Continental speculative materialism (for lack of better descriptors), represented by Robert Pippin and Slavoj Žižek, respectively. Pippin argues for a deflationary naturalist view in which Nature and Spirit are understood in terms of the space of causes and the space of reasons: the distinction between the two is not ontological or metaphysical, but merely a distinction between two incommensurable modalities of explanation. In contrast, Žižek argues for a robustly ontological distinction between Nature and Spirit, whereby Spirit is the realization of the incompleteness or 'non-All' of Nature, paradigmatically revealed by quantum physics. While Pippin directly criticizes Žižek for illicitly ontologizing the human capacity for rationality, I argue that Žižek is more faithful to Hegel's own goal of philosophically accounting for the Nature-Spirit transition.³

In §2, I turn to a debate internal to the Continental speculative materialist approach to Hegel, between Žižek and Adrian Johnston, regarding the best way to account for the development of Spirit out of Nature. Žižek maintains that quantum physics is the best proof of a ‘gap’ in Nature itself, e.g. via the uncertainty principle and quantum superposition, which provides the necessary room for Spirit to materialize. In contrast, Johnston argues that neuroscience provides the best picture of the emergence of Spirit from Nature, in keeping with a notion of ‘strong emergentism’ in the philosophy of biology. Whereas quantum physics would be placed at the earliest stages of Nature in Hegel’s *Encyclopedia*, neuroscience would belong to the most advanced stages, as part of the animal organism. But I argue that neither of these views tracks Hegel’s own argument for the transition from Nature to Spirit, which transpires neither through the fundamental structures of matter (e.g. quantum physics) nor through the most complex animal organ (i.e. the brain), but rather through a certain deadlock between sex and death.⁴

In §3, I examine Hegel’s views on sex and death in general, in conversation with Žižek’s critical readings of the same. In a rare moment of departure from Hegel, Žižek criticizes Hegel’s view on sexuality as developed in the *Philosophy of Right*: whereas Hegel seems to argue that sexuality is a merely natural phenomenon which must be sublated into the ethical-spiritual relation of marriage, Žižek argues that psychoanalysis shows sexuality to be a properly ‘meta-physical’ passion, one which already exceeds Nature. But I argue that Hegel’s account of sex at the end of the *Philosophy of Nature* already anticipates this psychoanalytic insight, insofar as Hegel there argues that it is the contradiction between the sex-drive and the death-drive which drives the birth of Spirit from out of Nature. I likewise respond to Žižek critique of Hegel as unable to think the pure repetition of the death-drive in Lacanian psychoanalysis. I argue that it is precisely the ‘bad infinite’ of this pure repetition, evinced in the contradiction between sex and death, that Hegel takes to be the key to the emergence of subjectivity or Spirit from Nature.⁵

Finally, in §4, on the basis of the above, I examine the *Encyclopedia*’s transition from Nature to Spirit directly, developing a new account of this transition in terms of Hegel’s conception of ‘decision’ (*Entschluss*). Recent work by Rebecca Comay and Frank Ruda has foregrounded the role of decision in Hegel (connected to the motif of undecidability in Derrida and Badiou), at both the beginning of Logic and in the transition from Logic to Nature.⁶ I argue that the latter can provide a model for understanding the transition from Nature to Spirit. At the end of Hegel’s *Logic*, the Absolute Idea remains trapped within its own pure thinking, from which it undergoes a drive (*Trieb*) to escape: the Absolute Idea decides to release itself from pure thinking into the externality of space and time, the first shape of Nature.⁷ Analogously, I argue that, at the end of the *Philosophy of Nature*, the animal organism remains trapped

within its own naturalness, from which it undergoes two drives—the sex-drive and the death-drive—to similarly escape: the animal thereby decides to release itself from its animality to become more-than-Nature, i.e. to become Spirit. I compare this account with Žižek's notion of the 'abyssal act', as both the groundless ground of the material world, and as the political creation of a new form of life.⁸

I conclude by considering how this new view of the Nature-Spirit transition can be brought to bear upon the two sets of debates covered in the prior sections. I also briefly consider the possible limits of Hegel's view on the Nature-Spirit relation in relation to contemporary philosophical alternatives, e.g. reductionist physicalism and dualist supernaturalism, as well as its political implications.

1. Naturalism vs. Materialism: The Pippin-Žižek Debate

For much of the 19th and 20th centuries, the dominant interpretation of Hegel was what would be retroactively described as the 'traditional metaphysical view'. On this view, Hegel's notion of Spirit was thought to refer to an infinite cosmic mind or world-soul, which providentially pulled the strings of the universe, e.g. by directing the course of human history towards its own self-actualization.⁹ In the middle to late 20th century, this view came under increasing pressure from scholars of Hegel, who began to question whether it accurately captured Hegel's position. There were good reasons to be suspicious of the traditional metaphysical view: it seemed to attribute to Hegel a regression to pre-Kantian dogmatic rationalism, whereas Hegel is always clear that he takes himself to be genuinely post-Kantian. Today, Hegelians across the Analytic-Continental divide almost uniformly reject the traditional metaphysical view, but they disagree sharply about what is to be put in its place. Above, I alluded to two possible alternatives: neo-pragmatic naturalism and speculative materialism, represented by Pippin and Žižek, respectively. Let us examine these two positions in turn.

For Pippin, the distinction between Nature and Spirit is not an ontological or metaphysical one, but rather a distinction between two modalities of explanation: borrowing from Sellars' terminology, it is a distinction between the space of causes and the space of reasons.¹⁰ To approach the world from the standpoint of the space of causes means tracing effects to their prior physical causal grounds, as per the laws of Nature determined through the empirical natural sciences. All observable phenomena can be investigated in this way, including human behaviour, which obeys causes found within biochemistry, evolutionary biology, etc. But human beliefs and desires can *also* be approached from the standpoint of the space of reasons. Here, we look at that for the sake of which human beings think or act the way they do, i.e. for the *reasons* guiding their thought and action, rather than natural causes.

While it is true that natural causes are also at play, the space of reasons is irreducible to such causes: reasons in this sense are explanatorily independent from Nature, instead forming a domain of their which Hegel comes to call ‘Spirit’.¹¹ This view can and should still be called ‘naturalism’, however, because it only admits the natural world into its account of ‘what there is’: humans are just peculiar animals who happened to have developed certain reasoning capacities, which have opened up the space of reasons for us, but which do not require positing any non-natural or super-natural beings. Pippin originally called his view ‘non-metaphysical’, but he later admitted that it does have a metaphysics after all—a kind of “disenchanted Aristotelian naturalism,” to borrow Pinkard’s phraseology.¹² (More felicitously, Pippin thinks Hegel rejects special metaphysics, while still having a general metaphysics.) I have further denominated this a ‘neo-pragmatic’ naturalism, to pick out simultaneously Sellars’ pragmatic tendencies, the influence of classical pragmatism (e.g. Dewey) on Analytic Hegelians today, and the role of the Analytic ‘return to Hegel’ as an effort to respond to certain strains of radical pragmatism, e.g. Rorty (as with Brandom, who was one of Rorty’s students).¹³ On this reading, Hegel is not a return to pre-Kantian dogmatism because he works to therapeutically ‘dissolve’ traditional metaphysical questions, diagnosing their abstractness or one-sidedness. So, in Hegel’s hands, philosophy is no longer in the business of metaphysical speculation about God, angels, the soul, creation, etc. Instead philosophy becomes an examination of humanity’s real historical existence, our social-political forms of life, our pragmatic normative commitments, and so on.

In contrast, for Žižek, there is indeed an ontological or metaphysical distinction between Nature and Spirit. Of course, this is not to say that Spirit denotes some supernatural realm ‘beyond’ Nature, since this would incur the charge of an abstract dualism that Hegel is always eager to avoid. Rather, Žižek takes up the famous theme of the ‘impotence’ (*Ohnmacht*) of Nature from Hegel’s *Philosophy of Nature* to argue that Hegel sees Nature as constitutively incomplete or ‘non-All’, and that Spirit is to be found precisely in the ‘gap’ in Nature itself that this constitutive incompleteness opens up.¹⁴ Just what this incompleteness amounts to can be cashed out in a number of complementary ways. In the *Philosophy of Nature* itself, Hegel explains Nature’s impotence in terms of its necessarily-incomplete realization of its own Concept. Since Nature is defined as the Idea ‘outside of itself’ or in its ‘externality’, it always falls short of complete conceptual determination. Žižek turns to quantum physics for a contemporary illustration and confirmation of this Hegelian point. The Heisenberg uncertainty principle demonstrates that momentum and position cannot both be determined with absolute precision simultaneously: the more precision in determining momentum, the less in position, and vice versa. So, at any given moment, Nature is only incompletely determined with respect to these physical quantities.¹⁵ Likewise, quantum superposition

entails that a given particle can be in multiple contradictory states at one and the same time: Nature is again incompletely determined.¹⁶ Žižek finds a comparable account of incompleteness in Lacanian psychoanalysis, from which he takes the notion of the ‘non-All’ (*pas-toute*). For Lacan, subjectivity itself is possible precisely because reality itself is non-All, i.e. incomplete.¹⁷ In Hegelian terms, the subject is not something over and above substance, but rather the mark of substance’s own internal self-contradiction, by virtue of which it fails to exhaust the real, even if it remains true that there is nothing ‘beyond’ substance.¹⁸ Žižek argues that the fundamental metaphysical commitment in Hegel is to absolute negativity. In the beginning, there is only this negativity, a ‘less than nothing’; this negativity is so negative, so to speak, that it negates itself, thereby generating the natural world of determinate positive entities in which we live. But this negativity continues to haunt the world, ensuring that it is always incomplete, barred, etc. Subjectivity just *is* this ‘gap’ in Nature itself, the living proof of its incompleteness. Why call this ‘materialism’? By ‘materialism’, Žižek stipulates that he is simply referring to the famous Lacanian slogan: “The big Other does not exist” or “There is no big Other” (*il n'y a pas de grand Autre*).¹⁹ There is no ultimate fixed guarantor of the meaning or direction of the world, e.g. a transcendent God, or even the laws of Nature themselves. As Žižek is keen to emphasize, this is a “materialism without matter,” in the sense that the fundamental reality is not the bits of material stuff we interact with on a daily basis, but absolute negativity itself.²⁰ I further call this a ‘speculative’ materialism to indicate Žižek’s affinity with the broader speculative turn in contemporary Continental philosophy, e.g. Badiou, Meillassoux, etc., whose ontologies of the Void and hyper-chaos, respectively, share numerous affinities with Žižek.²¹

In a review of Žižek’s *Less than Nothing: Hegel and the Shadow of Dialectical Materialism*, originally titled “Back to Hegel?” and later retitled “Slavoj Žižek’s Hegel,” Pippin offers a charitable but forceful critique of Žižek’s view of Hegel, including his view of Hegel’s ‘materialist’ ontology. Pippin takes issue with Žižek’s claim that Hegel can account for subjectivity only by positing ‘gaps’ or ‘holes’ in Being, substance, Nature, etc. As Pippin reads him, Hegel follows Kant in taking self-consciousness (i.e. apperception) to be the *sine qua non* of subjectivity. But Pippin argues that self-consciousness is simply the capacity to think and act on the basis of reasons, which cannot be reduced to physical causes, and yet which requires no special ontological conditions either. As Pippin writes:

Doxastic, cognitive, and intentional states [i.e. self-conscious states] are ... “in the space of reasons” and to ask for, say, neuro-psychological causes for having come to be in that state, is to make a category mistake; to have misunderstood the question; to offer something we cannot use. Such causes are irrelevant to my having

the reasons I have (the “for-itself” of any such “in-itself” in Hegelian lingo), and your understanding the reasons I have, all of which must be enunciated and “backed” first-personally. No gaps in being need apply; any more than the possibility of people playing bridge, following the norms of bridge, and exploring strategies for winning need commit us to any unusual gappy ontology to account for the possibility of norm-responsive bridge following. Anyone playing the game is not just acting out responses to cues, but is, at the same time as playing and making moves, always “holding open” the possibility of revising their strategy, challenging someone on the rules and so forth. This is what it is to be following rules, not to be instantiating laws. This capacity is possible because it is certainly actual, and that means that materially embodied beings are able to engage in complex, rule-following practices, the explanation of which is not furthered by reference to their neurological properties. ... Of course, it is possible and important that some day researchers will discover why animals with human brains can do these things and animals without human brains cannot, and some combination of astrophysics and evolutionary theory will be able to explain why humans have ended up with the brains they have. But these are not philosophical problems and they do not generate any philosophical problems.²²

Pippin’s point here is easy enough to discern. While human beings are simply a special kind of animal—this is Pippin’s naturalism—still our capacity for self-conscious reasoning forms a domain of inquiry all its own (viz. Spirit). But this properly human domain does not need to be explained by any gaps in Being: rather, it can be explained by the much more mundane fact that the human animal happens to have developed the ability to engage in rule-following, normativity, etc.

In his later *Absolute Recoil*, Žižek’s responds directly to Pippin’s critical review. As Žižek observes: “The underlying ontological premise of Robert Pippin’s reading of Hegel (rarely explicitly stated but nonetheless clearly indicated here and there) is that, in the evolution of animal life and of human animals on Earth, the human species somehow (this indeterminacy is crucial!) began to function in the modes of normativity and mutual recognition.”²³ Thus Nature and Spirit are not two different kinds of things, but two different sets of criteria for explanations: physical causes and normative reasons, respectively.²⁴ But Žižek contends that Pippin’s willingness to treat human beings as nothing more than special kinds of animals—even going so far as admitting that, one day, we will be able to explain in purely natural-scientific terms why it is that human brains are capable of self-conscious reasoning at all, as in the end of the long quotation from Pippin above—marks the “obscene secret” of the post-metaphysical view of Hegel, as of post-metaphysical philosophizing in general.²⁵ If such an explanation were possible, Žižek argues, what

room would be left in the natural world for human freedom—in particular, the freedom of thought and action that Hegel takes to be constitutive of human rationality? Kant had already recognized the threat posed to freedom by a thoroughgoing naturalism. If Nature is all there is, with natural laws fully determining everything that happens therein, then we would not be free—e.g. we could not veridically ascribe our beliefs and actions to ourselves, which Pippin takes to be necessary for self-consciousness. Kant took the antinomies of pure reason to signify that Nature is *not* all there is, therefore positing a supersensible world *beyond* Nature, in which transcendental freedom could dwell. In contrast, Žižek reads Hegel as ontologizing the Kantian antinomies: reason's contradictions show that reality itself is *immanently* incomplete, opening up an ontological 'gap' in which freedom, Spirit, subjectivity, etc., can find room to become actual, as we will continue to explore below.²⁶

Who is right? Without being able to make a complete definitive case here, I want to suggest that Žižek's view better tracks Hegel's philosophical desideratum of a new metaphysics of Spirit, a new rational psychology on the model of Aristotle's *De Anima*, etc.²⁷ It seems to me that Hegel would regard it as insufficient to determine Spirit as merely the capacity for rule-following possessed by certain odd animals. Rather, Spirit is an independent ontological reality that must be accounted for on ontological terms. Yet it seems to me that Hegel would also want to reject any simple dualism between causes and reasons, or between Nature and Spirit. Rather, as the *Encyclopedia* system shows, Logic, Nature, and Spirit form a continuous trajectory of the Absolute Idea in its movement from pure Being to Absolute Spirit (a trajectory which is ultimately a circle, of course). Pippin rejects the question of the emergence of Spirit from Nature, or of reasons from causes, as a problem that does not belong to philosophy proper. But it seems to me that Žižek is right to regard this as one of Hegel's great philosophical question, which Hegel himself does indeed try to answer philosophically: How does Spirit arise from Nature? How does subjectivity arise from substance? What must the structure of substance or Nature be, such that subjectivity or Spirit could emerge from it? The question for us now is: What really is Hegel's answer to these questions, and does this answer work?

2. Quantum Physics vs. Neuroscience:

The Žižek-Johnston Debate

In the previous section, we traced the debate between Analytic neopragmatic naturalism and Continental speculative materialism as two competing views on Hegel. I suggested that the latter has a notable advantage over the former, insofar as it takes upon itself the Hegelian task of giving a philosophical account of Spirit's arising from out of Nature. Now, I want to turn to a second debate internal to the materialist

reading of Hegel, over how precisely this transition between Nature and Spirit is to be accounted for. As we already saw above, Žižek argues that quantum physics is the key to understanding the possibility of Spirit qua subjectivity. Johnston raises a series of objections to Žižek's privileging of quantum physics, touting neuroscience instead as the contemporary scientific modality best suited to explaining the emergence of the subject. Let us again examine these two positions in turn.

Žižek's pairing of Hegel with quantum physics may seem anachronistic, since quantum physics would not be discovered until nearly a century after Hegel's death. Yet Hegel always insisted that the *Philosophy of Nature* must take its cue from the empirical sciences, such that it would always need to be re-written in light of new scientific developments.²⁸ Hegel would surely have been overjoyed to see just how much quantum physics confirmed the general dialectical-speculative picture of reality. But how, according to Žižek, can quantum physics be deployed to specifically explain the birth of Spirit out of Nature, subjectivity out of substance? Recall Kant's critical resolution to his Third Antinomy: If we suppose that everything in Nature is governed by deterministic mechanical causal natural laws, i.e. Newtonian physics, then there is no room for freedom—since freedom requires an absolutely spontaneous beginning of a new causal series, without determination by prior antecedent causes. But if we restrict Nature to the sensible or phenomenal world, and posit a supersensible or noumenal world *beyond* Nature, where the laws of Nature do not obtain, then freedom can find a home. Of course, Hegel wants to reject this Kantian dualism between phenomena and noumena, and yet still somehow affirm human freedom. (In contrast to Spinoza, who simply accepts that, since All is Nature, determinism or necessitarianism is true.) How can this be done? Žižek argues that quantum physics does the trick, since it shows (at least on the Copenhagen interpretation²⁹) that Nature is *not* deterministic, but rather obeys a form of quantum indeterminacy. All quantum events are modelled by the Schrödinger equation, which gives a probability distribution rather than strictly deterministic predictions for quantum systems. So, *pace* Kant, there *is* room for freedom after all, in the 'gaps' left open by Nature's indeterminacy. Indeed, quantum physics seems to show that the collapse of the wave-function from a superposition to a determinate quantum state takes place through the very act of observation itself (the so-called 'observer effect'), as if subjectivity is directly intervening into the natural world.³⁰ Žižek links all of this with what he takes to be the Hegelian story about the origins of the natural world itself. For Žižek's materialist Hegel, the world arises from the groundless ground of absolute negativity, which negates itself in order to produce the determinate material entities of our everyday experience. This corresponds to the scientific conception of the quantum vacuum, which is inherently 'unstable' such that particles can and do spontaneously erupt from out of the void.³¹ Žižek argues that subjectivity just is the incarnation

or embodiment of this fundamental ontological negativity, the ‘less than nothing’ that underlies our material reality.

In general, Johnston is a notable ally of Žižek’s, sharing with him the speculative materialist reading of Hegel, as well as the synthesis of Hegelian philosophy with Lacanian psychoanalysis.³² Thus Johnston’s objections to Žižek’s privileging of quantum physics are intended as friendly amendments within the background of a shared approach, while nevertheless striking quite deep at some of Žižek’s basic ontological claims. For Johnston, positioning quantum physics as the key to a Hegelian explanation of the possibility of subjectivity cannot be right, since quantum physics—once incorporated into a revised version of Hegel’s *Philosophy of Nature*, in light of the latest scientific discoveries—would belong to the earliest or most rudimentary levels of Nature, which are the furthest away from Spirit. Recall the three major divisions of the *Philosophy of Nature*: Mechanics, Physics, and Organics. Mechanics deals with the simplest forms of Nature: space and time, matter and motion, etc. Physics begins to treat more determinate forms: e.g. the four elements, sound and heat, electricity, and chemistry. Finally, Organics turns to plant and animal organisms, the highest forms of Nature, from which the transition is made to Spirit. Now, quantum physics deals with the most basic constituents of matter, the elementary particles that compose the Standard Model of particle physics. Therefore it would have to take its place either as part of the Mechanics section of the *Philosophy of Nature*, or at the most in Physics. It certainly would not belong to Organics, which involves much more complex phenomena than quantum physics. (Elementary quantum particles combine into atoms, and atoms combine into molecules. But even the simplest single-cell organism is made up of millions of molecules, combined in enormously complicated ways.) But Hegel’s transition from Nature to Spirit is really a transition from the last stage of Nature to the first stage of Spirit, i.e. from Organics to Subjective Spirit (or even more specifically, from the Animal Organism to Anthropology, i.e. the human being). So quantum physics would be the wrong place to look for an explanation of this transition. Indeed, Johnston avers that Žižek concern with the birth of cosmos out of the quantum void is much more Schellingian than Hegelian.³³ For Hegel, these kinds of concerns belie a pernicious abstraction from concrete life, having famously remarked that even the lowliest organic slime is higher than all the vast expanse of the celestial spheres.³⁴

Johnston’s own positive view is that the emergence of Spirit from Nature is best addressed through neuroscience, the contemporary scientific discipline which investigates the most sophisticated organ of the human body (viz. the brain), by virtue of which we possess the distinctively human faculties of reasoning, self-consciousness, etc. This would seem to more closely follow the architecture of Hegel’s own system, where the transition from Nature to Spirit passes through the human

animal as such. In contemporary philosophical terms, Johnston affirms a 'strong' emergentism to provide a non-reductive materialist account of the possibility of subjectivity within the natural world. Strong emergence explains how it is that higher-order structures can arise from more basic constituent while remaining irreducible to them: e.g. chemical elements emerging from physics, biological organisms emerging from chemistry, and human subjectivity emerging from our biology.³⁵ Or, put in terms of Kant's Third Antinomy once again, it is Kant himself who admits that biological organisms are irreducible to mechanical causal laws, operating instead under teleological judgments. While Kant treats teleological judgment as a subjective requirement of our finite human faculties, Hegel argues that teleology is objectively constitutive of the life of biological organism themselves.³⁶ Spirit would then simply be a higher level of this teleology or purposiveness: a self-conscious or self-determining purposiveness that sublates the 'blind' purposiveness of mere animal life. Teleology splits the difference between the Thesis and the Antithesis of the Third Antinomy, since it neither obeys the mechanical laws of Newtonian physics ('No Newton for a blade of grass', as Kant puts it), nor does it reside in some otherworldly noumenal realm.³⁷ As Johnston argues, the neurobiological pathways and feedback loops of the human brain evince precisely the kinds of self-referential structures that Hegel associates with subjectivity. The brain's 'neuroplasticity' means that it is uniquely capable of shaping and re-shaping itself, as well as standing in a dynamic interrelation with other individuals and with the external world.³⁸ This dovetails with Johnston's (and Žižek's) commitment to Freudian-Lacanian psychoanalysis: while Freud's neurological speculations have often been treated with suspicion by those who would prefer to see psychoanalysis merely as a method of cultural or literary criticism, Johnston affirms them as part and parcel of a serious materialist account of the subject.³⁹ (If psychoanalysis is simply the analysis of the *psyche*, the old Greek word for 'soul', then it finds a natural partner in Hegel's philosophy of Spirit, which he takes to be a speculative post-Kantian revival of Aristotelian rational psychology.⁴⁰)

Žižek has had occasion to respond to Johnston's objections, defending his frequent recourse to quantum physics in explaining Hegel's conception of subjectivity.⁴¹ As Žižek first summarizes Johnston's critique, "what Johnston rejects is the notion of negativity as a primordial unanalyzable Void which disturbs the homeostatic cycle of natural reproduction, throwing it off its rails and introducing the dimension of subjectivity," favouring instead an account which foregrounds "the concrete biological (pre)conditions of the rise of negativity ... [the] 'denaturalization' of natural life which opens up the space for symbolic activity as an attempt to supplement the deficiency."⁴² In short, subjectivity emerges not through the "glorious abyss of negativity" described by quantum physics, but from "a very precise biological deadlock."⁴³ Žižek replies to this critique as follows:

My counter-argument here is that this line of thought should nonetheless be further developed in (at least) two directions. While “rotten nature,” the failure and dysfunctionality of animal life, opens up the space for the symbolic, the entry of the symbolic still cannot be causally explained in this way—it does indeed occur as a “miracle,” *ex nihilo*. In other words, there is no teleology here, the symbolic only retroactively renders its natural (pre)conditions readable as such, as its (pre)conditions. But how is this “miraculous” entry *ex nihilo* possible? How should the “pre-human Real” be structured so that the symbolic can explode in its midst? A possible answer is indicated by speculations in quantum physics about the virtual Void out of which (particular) reality emerges through the collapse of the wave function: negativity materialized in the symbolic process is not something that magically cuts into positive nature; it rather (re)actualizes at the specific level a negativity immanent to the “pre-human Real” as such. So while it is true that the emergence of (human) negativity can take place only against the background of certain biological (pre)conditions, the pre-human Real itself *does* emerge *ex nihilo*.⁴⁴

As I read him here, Žižek is doubling-down on his commitment to quantum physics and the ‘glorious abyss’ of negativity as the proper account of the possibility of subjectivity. While he admits that there may be certain biological preconditions of the transition from Nature to Spirit, still this transition itself can only be a radical leap or cut, equivalent to a new creation *ex nihilo*. For Žižek, this leap should be understood as the re-actualization of the absolute negativity latent in the deepest depths of the pre-human world—not at the biological level, but at the deeper quantum level. To try to give a causal explanation for subjectivity by tracing its emergence from organic systems (e.g. the human brain), as Johnston hopes to do, would end up reducing Spirit to Nature. Only a quasi-miraculous leap between Nature and Spirit can respect their genuine distinction from one another.

Again, who is right? It seems to me that there are things to be said in favour of both views. No doubt Johnston is right to emphasize that the transition from Nature to Spirit takes place via Nature’s most highly advanced form, viz. the animal organism, and so this must have some role to play in an account of this transition. But Žižek is also right to be wary of any account that would cast Spirit as merely a continuous outgrowth of prior natural biological features of the human animal, e.g. the human brain—which, even if Johnston seeks to avoid it, he may still fall prey to. Yet it also seems that Johnston is right to worry that quantum physics is more of a *deus ex machina* than a genuine philosophical explanation of subjectivity. Still, it remains curious that neither Žižek nor Johnston makes use of the specific details of the transition from Nature to Spirit as

it is presented in Hegel's *Encyclopedia* itself. There, the transition takes place neither through quantum physics nor through neurobiology, but through a certain deadlock between sex and death. How might Hegel's view of this deadlock illuminate the two sets of debates that we have been reconstructing thus far?

3. Hegel on Sex and Death: Natural or Spiritual?

In a sense, the previous two sections have been merely preparatory, setting us up for the problem we now want to address. We have determined that we need a philosophical account of the transition from Nature to Spirit, and that existing treatments of this transition—e.g. via quantum physics or neuroscience—still leave us with unresolved questions. Specifically, they leave open the significance of Hegel's own official explanation of this transition in the *Encyclopedia*, via the animal organism's encounter with sex and death.

There may be an understandable reason for Žižek's avoidance of the *Encyclopedia*'s Nature-Spirit transition, namely Žižek's own dissatisfaction with Hegel's conception of sexuality. In a rare moment of direct criticism, Žižek accuses Hegel of falling short of the psychoanalytic account of the sex-drive as a 'meta-physical' passion:

Far from providing the natural foundation of human lives, sexuality is the very terrain upon which humans detach themselves from nature: the idea of sexual perversion or of a deadly sexual passion is totally foreign to the animal universe. Here, Hegel himself falls short of his own standards: he only describes how, through culture, the natural substance of sexuality is cultivated, sublated, mediated—we humans no longer just make love for procreation, we enter into a complex process of seduction and marriage in which sexuality becomes an expression of the spiritual bond between a man and a woman, and so on. However, what Hegel misses is how, in humans, sexuality is not only transformed or civilized, but, much more radically, *changed in its very substance*: it is no longer the instinctual drive to reproduce, but a drive that finds itself thwarted in relation to its natural goal (reproduction) and thereby explodes into an infinite, properly meta-physical passion.⁴⁵

Notably, Žižek here is taking the locus of Hegel's view of sexuality to be the *Philosophy of Right*, where Hegel argues that marriage involves the sublation of merely natural-animal sexuality into a spiritual-ethical relationship.⁴⁶ Against this view, Žižek maintains that sexuality itself is the means by which the human being 'detaches' themselves from Nature, giving rise to Spirit. (Human sexuality is thus 'meta-physical' in the sense that it is beyond *physis* or Nature, instead already belonging to Spirit.)

But it is not at all clear that the *Philosophy of Right* is the proper place to look for Hegel's considered view of sexuality. Rather, the *Philosophy of Nature* has a much more developed account of sex in its final sections on the animal organism. Now, it might seem that this is precisely to Žižek's point, since Hegel would apparently be classifying sexuality as part of our merely natural animality. Yet Hegel's argument is exactly the opposite: insofar as sexuality comes at the end of the *Philosophy of Nature*, it marks the point at which Nature itself is 'thwarted' from within, the precise point at which the human being 'detaches' from Nature and transitions into Spirit. If this is right, then Hegel does *not* fall short of his own standards, as Žižek supposes, but meets those standards perfectly. For Hegel as for Žižek, sexuality is an infinite metaphysical passion that pushes the animal beyond itself into the properly human.

Of course, the sex-drive is only one half of Hegel's story about the transition from Nature to Spirit. The final section of "The Animal Organism" in the *Philosophy of Nature* is C. The Process of the Genus, which is itself divided into 1. The Sex Relation, 2. Genus and Species, and 3. The Genus and the Individual. The last of these is further sub-divided into a. The Disease of the Individual, b. Therapy, and c. The Self-Induced Destruction of the Individual. By "self-induced destruction," Hegel means that the animal organism necessarily reaches the point of death due to the inadequation between the genus and the individual. This inadequacy means that the animal organism must eventually experience an internal breakdown (a. The Disease of the Individual), which can be staved off through medical treatment for a time (b. Therapy), but will inevitably result in the death of the animal. In short, then, the death-drive is just as important, if not ultimately more important, than the sex-drive for the Nature-Spirit transition. What does Žižek make of Hegel's conception of death?

It is well-known that Žižek understands the central impetus of his own philosophical project to be the synthesis of Hegelian philosophy and Lacanian psychoanalysis, specifically through an identification of Hegel's absolute negativity with Lacan's death-drive, which together Žižek takes to be the locus of subjectivity.⁴⁷ Both absolute negativity and the death-drive provide for the self-relating or self-positing structure of the subject, the 'gap' in natural substance through which freedom, Spirit, etc., can emerge. We might expect, then, that unlike Žižek's critique of Hegel's view of sex, he would have a more positive evaluation of Hegel's view of death. While this may be so to some degree, Žižek nevertheless does again articulate a critique of the Hegelian conception of death, as falling short of the psychoanalytic death-drive. Recall that Freud identifies the death-drive as the repetition-compulsion—e.g. in *Beyond the Pleasure Principle*, the death-drive manifests as the compulsive repetition of the same traumatic dream, re-inflicting the pain of the trauma on the individual again and again.⁴⁸ As Žižek writes: "what Freud was aiming at with his notion of the death drive ... is the 'nondialectical' core of Hegelian negativity, the pure

drive to repeat without any movement of idealization.”⁴⁹ But then this non-dialectical core remains inaccessible to Hegel himself, as Žižek asserts repeatedly in *Less than Nothing*, e.g. “Hegel cannot think pure repetition (a repetition not yet caught in the movement of sublation or idealization).”⁵⁰ Another way to put Žižek’s critique here would be on analogy to his critique of Hegel on sex: while for Hegel, death is a natural-animal fact which is later sublated into a spiritual-ethical one when the human being comes face-to-face with their own mortality, he misses the dimension of death as already a meta-physical reality, which disrupts the natural cycle and carries the human being beyond Nature.

But is it really true that Hegel cannot think pure repetition, or that he regards death as a merely natural-animal fact? On the latter charge, as with sex above, it would seem that the opposite is the case: Hegel’s argument that death marks the point of transition from Nature to Spirit suggests once again that it is only through the encounter with death that the human being detaches themselves from Nature and becomes properly human, i.e. Spirit. More precisely, it is the metaphysical ‘passion’ of death, what will later be called the death-drive, that drives the human being out of their naturalness. As for the former charge, Hegel explains the contradiction or deadlock between sex and death precisely in terms of the endless repetition of the so-called spurious or ‘bad’ infinite (*schlechte Unendlichkeit*): “This process of propagation [i.e. sexual reproduction] spends itself in the spurious infinite progress. The genus preserves itself only through the destruction of the individual who, in the process of generation, fulfil their destiny and, in so far as they have no higher destiny, in this process meet their end.”⁵¹ For Hegel, sexual reproduction means that we keep reproducing new members of our species generation after generation, where the old generation dies off in order to make room for the new one, *ad infinitum*. Sex and death simultaneously mutually require and mutually contradict one another: they have opposite aims (the creation and destruction of individuals, respectively), and yet without the other they would each collapse under their own weight. This alternating process of birth and death does not go anywhere, but just repeats itself endlessly: one finite generation comes and another finite generation passes away, and so on forever. This is the exact structure of the bad infinite, which Hegel frequently cashes out in terms of “repetition.”⁵² There is nothing truly or genuinely infinite here, since the sex-death relation is comprised solely of units of finitude strung together in an indefinite sequence.

So, it would seem that the transition from Nature to Spirit would require sublating Nature’s bad infinite in Spirit’s true infinite (*wahrhafte Unendlichkeit*). Is this not to Žižek’s point, namely that Hegel fails to realize that the pure repetition of the death-drive is the genuine root of Spirit or subjectivity, rather than a merely natural condition to be spiritually overcome? Yet, as Žižek himself teaches us so well with respect to the Hegelian distinction between the understanding (*Verstand*) and reason

(*Vernunft*), the true infinite is not something ‘other’ than the bad infinite, but rather simply a shift of perspective on the bad infinite itself, whereby we cease to posit a ‘beyond’ of finitude, instead taking up what is already there as genuine infinity.⁵³ In our present case, this would mean that Spirit does not somehow escape the endless repetition of sex and death, but rather is itself the absolute positing of this repetition as *such*, affirming it as Spirit’s own infinite content.⁵⁴ Indeed, as I will suggest below, Spirit is constituted above all by its History, where History itself is possible only thanks to the bad infinite of sex-death—the passage of the generations, etc. Spirit’s historicity means nothing more than making explicit its own dependence on the dead generations of the past, taking up this past as its own: recollecting it, mourning it, and even breaking from it, when the time is ripe.⁵⁵

But so far this is all by way of surmise and suggestion; we must still see whether it is borne out in the text of the transition from Nature to Spirit at the end of the *Philosophy of Nature*. In the final section, Hegel elaborates the “self-induced destruction of the individual”: “The disparity between [the individual animal’s] finitude and universality is its *original disease* and the *inborn germ of death*, the removal of this disparity is itself the accomplishment of this destiny. ... [I]t is in this way that the animal brings about its own destruction.”⁵⁶ Could any better description of the death-drive be imagined? The animal is driven to its death not by any external causes, but by its own inner self-movement towards self-destruction. In the final paragraph, Hegel then finally gives his account of the transition to Spirit:

But this achieved identity with the universal is the sublation of the *formal opposition* between the *immediate singularity* of the individuality and its *universality*; and this is only one side, and that the abstract side, namely, the *death of the natural being*. But in the Idea of life, subjectivity is the Concept, and it is thus *in itself* the absolute *being-within-itself* of *actuality* and concrete universality. Through the sublation of the *immediacy* of its reality just demonstrated, subjectivity has coalesced with itself; the last *self-externality* of Nature has been sublated and the Concept, which in Nature is present only *in principle*, has become *for itself*. With this, Nature has passed over into its truth, into the subjectivity of the Concept whose *objectivity* is itself the sublated immediacy of singularity, is *concrete universality*; so that the Concept is posited as having for its *determinate being* the reality which corresponds to it, namely, the Concept—and this is *Spirit*.⁵⁷

Obviously this is an extremely compressed and difficult passage, but the general contours of Hegel’s line of thinking can nevertheless be discerned. The animal’s death achieves a merely abstract identity between individuality and universality. In contrast, subjectivity, the Concept, Spirit,

etc., constitute the *concrete* identity of the same, i.e. the ‘concrete universal’. With the death of the animal, it is as if the last vestiges of Nature’s mere abstraction, immediacy, externality, objectivity, etc., have died away with it. In its wake, subjectivity is able to ‘coalesce’ with itself, to move from the in-itself to the for-itself, to posit its own reality. This is all well and good, but it does not quite tell us *how* or *why* this all transpires in the way Hegel is describing it. In the Addition to the final paragraph, Hegel characterizes this transition in even more evocative terms:

The living being is, it is true, the supreme mode of the Concept’s existence in Nature; but here, too, the Concept is present only in principle, because the Idea exists in Nature only as a singular. ...

Now since this existence is still inadequate to the universality of the Idea, the Idea must break out of this circle and by shattering this inadequate form make room for itself. ... The goal of Nature is to destroy itself and to break through its husk of immediate, sensuous existence, to consume itself like the phoenix in order to come forth from this externality rejuvenated as Spirit.⁵⁸

Here Hegel fills out some of the crucial details that remain only implied in the written *Encyclopedia* paragraph. What is driving the movement from Nature’s abstract externality to the concrete universal of Spirit is the *Idea*: it is because Nature is an inadequate existence of the Idea that the Idea must break out of Nature’s circle and become reborn as Spirit. But in order to understand how and why *that* takes place, we will need to ask: Why is Nature inadequate to the Idea, and why is Spirit adequate? How is the Idea able to break out of the circle of Nature, and how is Spirit thereby reborn from out of Nature’s dead husk? And furthermore, how might the answers to these questions intervene in the two sets of debates on the Nature-Spirit relation examined in the prior two sections?

4. On the Transition from Nature to Spirit: The Undecidable Decision of the Animal

In the final paragraph of the Introduction to the *Encyclopedia* as a whole, Hegel explains that Logic, Nature, and Spirit are all expressions of the Idea: Logic is “the Idea in and for itself,” Nature is “the Idea in its otherness,” and Spirit is “the Idea returning back to itself from its otherness.”⁵⁹ Hegel makes the same point in the final chapter of the *Science of Logic*: Logic, Nature, and Spirit are the three modes or manifestations of the Absolute Idea—Logic is the “universal” mode, while Nature and Spirit are the two particular modes.⁶⁰ What are the relations between these three modes? How and why do they each transition into the next?

At the end of the *Logic*, Hegel gives his infamous account of the transition from Logic to Nature. Having traversed the whole science of

Logic from the pure Thought of pure Being to the Absolute Idea as pure self-thinking Thought, we complete the circle of this science when the Absolute Idea rejoins with Being. Yet the Absolute Idea still finds itself to be “shut up” (*eingeschlossen*) in this closed circle of its own pure thinking. As Hegel explains, it thereby undergoes the “drive” (*Trieb*) to escape from this situation: the Absolute Idea makes the “decision” (*Entschluss*) to release or discharge itself (*sich Entlassen*) from its own closed circle into the externality of space and time, the first forms of Nature.⁶¹ This account is infamous because, at this crucial moment in Hegel’s system, he seems to raise a whole series of further questions: Is this transition logical, natural, both or neither? Is it really a transition at all? What exactly is so wrong with the Absolute Idea remaining ‘shut up’ in pure thinking? What is the ‘drive’ that pushes the Absolute Idea into externality? In what sense is this a ‘decision’ on the part of the Absolute Idea? Comay and Ruda have recently argued for the centrality of Hegel’s conception of decision to a proper understanding of his philosophical project. Indeed, Hegel’s *Logic*, and thereby the *Encyclopedia* system as a whole, begins with the “decision” to consider pure thinking as such, i.e. the decision to begin to philosophize—a decision which, as Hegel writes, can even be regarded as “arbitrary.”⁶² Accordingly, Comay and Ruda develop a reading of Hegelian decision in light of the motif of undecidability from 20th century French philosophy, especially Alain Badiou (who is broadly allied with proponents of the materialist Hegel).⁶³ Badiou adapts the notion of the ‘undecidable’ decision from the mathematics of Kurt Gödel, where undecidability designates a situation in which no established sets of rules, norms, etc., can determine the correct decision. It is only then that a true decision worthy of the name can be made, as opposed to a mere algorithmic calculation.⁶⁴ Applied to Hegel: While everything within the *Logic* proceeds with intra-logical necessity, the very decision to enter into the science of Logic in the first place—the decision to think—is undecidable. So too the decision that ends the *Logic*: the undecidable decision to cut off pure thinking and take a leap into the unknown or un-thought of Nature.

While much more obviously can and should be said about the Logic-Nature transition, I want to propose the following experiment: What if we tried to understand the transition from Nature to Spirit on analogy to the prior transition from Logic to Nature? The correspondences between the two are too numerous to be merely coincidental.⁶⁵ At the end of the *Philosophy of Nature*, the animal organism returns to the beginning of Nature through its own intuition of space and time.⁶⁶ But the animal remains ‘shut up’ within its own animality, or more generally, within the closed circle of its own naturalness. The animal therefore experiences two drives through which it seeks to break out of this circle: the sex-drive and the death-drive. Through the sex-drive, the animal tries to externalize itself into another—but this other is simply another animal once again, and so the same process continues. Through the death-drive, the animal

tries to externalize itself from itself by negating its own life—but this simply destroys the animal altogether, and so no true solution is found. Both the sex-drive and the death-drive are characterized by a ‘release’ or ‘discharge’: sexual release (also known as *le petit mort*, the little death), and the sweet release of death (‘giving up the ghost’, a ‘consummation’ devoutly to be wished). The deadlock between these two drives compels the animal to remain trapped within Nature. But the animal finally escapes by making a *decision*: the undecidable decision to become human, i.e. to become Spirit. Through this decision, the human being externalizes themselves from their own animality, and thereby becomes more than merely one animal among others. In Hegel’s terms, Spirit breaks out of the dead husk of Nature, and is reborn like a phoenix from the ashes. This means that, all indications to the contrary notwithstanding, ‘humanity’ is not a natural kind: to be human is a decision. So too, the transition from Nature to Spirit is not a natural transition: it is the decision of Spirit to retroactively create itself from out of its animal presupposition—for Spirit just *is* what it makes itself to be.⁶⁷ The comparison to Badiou is once again instructive: for Badiou, the subject is always a retroactive result of its own undecidable decision to have fidelity to an event.⁶⁸ So too, here it is an undecidable decision which give rise to Spirit’s subjectivity from out of Nature’s substance.

But what is it that truly distinguishes Logic, Nature, and Spirit from one another? What is it that is driving the leap from Logic to Nature, or from Nature to Spirit? I want to suggest that it is a drive towards novelty, the capacity for the *new* (exactly what Badiou would call the Event). In Logic, everything is eternally self-same, expressing as it does “God as He is in his eternal essence.”⁶⁹ At the end of Logic, by rejoicing the beginning in pure Being, the Absolute Idea comes to realize that nothing new will ever happen in the logical domain of pure thinking. Thus it decides to release itself into the first forms of Nature, space and time, for the sake of something new. Nature in general is a new domain, but space and time are also together the pure forms of novelty as such: they provide the spatiotemporal world in which things can happen, events can take place, etc., as opposed to the eternal self-sameness of Logic. Yet Hegel always insists that nothing genuinely new can happen in Nature alone, since Nature always merely repeats the same natural laws, natural kinds, and so on. Even if things do change in the natural world, these changes do not transform Nature itself, which always only returns to and repeats itself.⁷⁰ The highest form of Nature, the animal organism, therefore makes a decision to release itself into Spirit, in order that there may be something genuinely new, true novelty. Specifically, Spirit is capable of novelty by virtue of its History: what is new are the events of History, the self-transformations of Spirit into ever-new shapes. (Badiou draws an equivalent distinction: the Event cannot be found in Nature, but only in History.⁷¹) As Hegel writes: “Spirit is never at rest but always engaged in

moving forward.”⁷² So, there can be no end of History: there will always be new events to come, new shapes of Spirit to be created.⁷³

But in the last instance, *why* is the Absolute Idea driven towards novelty? I want to suggest a further speculative answer: for the sake of enjoyment—*Genuß*, or to borrow the psychoanalytic terminology, *jouissance*. Consider the final sentence of the *Encyclopedie*: “The eternal Idea, the Idea that is in and for itself, eternally remains active, engenders and enjoys itself as Absolute Spirit.”⁷⁴ The whole grand journey of the Absolute Idea from Logic to Nature to Spirit culminates in its own enjoyment as Absolute Spirit. Indeed, each of the three culminating moments of the three divisions of the *Encyclopedie* can be seen as a moment of enjoyment: the enjoyment of the Absolute Idea in its release from pure thinking at the end of Logic, the enjoyment of the animal in the sex-drive and the death-drive at the end of Nature, and finally the highest enjoyment of Absolute Spirit itself at the end of Spirit. Žižek remarks on the evident psychoanalytic resonances of the *Encyclopedie*’s final sentence: the trajectory by which the Absolute Idea loses itself in the externality of Nature only to regain itself in Spirit, achieving enjoyment through this circular self-movement, is “uncannily close” to Lacan’s account of the *jouissance* found on the circular path of the drive.⁷⁵

How does my proposed account of the Nature-Spirit transition, as achieved through the undecidable decision of the animal, compare to Žižek’s view? To be sure, the motif of undecidability is far from foreign to Žižek’s own reading of Hegel, though he prefers to use the moniker “abyssal”—whether the “abyssal act,” “abyssal ground,” “abyssal decision,” and so on.⁷⁶ To begin with, this dimension of the abyssal is found first of all in the advent of the material world itself: from out of the quantum void, absolute negativity makes a radical, groundless, or abyssal leap from its ‘less than nothing’ into our determinate positive reality. No doubt this corresponds to the transition from Logic to Nature, the Absolute Idea’s undecidable decision to release itself into the spatiotemporal natural world. At the other extreme, Žižek takes the ‘abyssal act’ to refer to the radical creation of a new world or new form of life, i.e. a new form of social-political organization. The abyssal act is a revolutionary leap which breaks from the old order and inaugurates a new one. In a sense, then, every revolution is a re-enactment of that originary creation *ex nihilo* whereby the world comes to be.⁷⁷ As I see it, this political transformation is the ultimate result of Absolute Spirit, marking the transition from Spirit to Logic: just as the Absolute Idea decides to create the world, Absolute Spirit decides to create a new world.⁷⁸ But there is still one transition missing: the transition from Nature to Spirit. Would Žižek see this transition too as ‘abyssal’? We saw Žižek argue above that, no matter what natural preconditions there may be for the emergence of subjectivity, this emergence itself can only happen all-at-once, in an *ex nihilo* quantum leap or abyssal act. As we already saw,

for very different reasons, both Pippin and Johnston criticize Žižek's view of the abyssal act as too Schellingian, whether in its role as groundless ground of the material world in general, the ontological source of Spirit's subjectivity, or the basis of a political revolution. But if the reading of Hegel's conception of the undecidable decision developed here and elsewhere is right, then Žižek's view would in fact be perfectly Hegelian. Johnston's critique of Žižek recourse to quantum physics, as belonging to the most rudimentary parts of a re-written philosophy of Nature, can thereby also be seen in a new light. If the end of Nature involves a circling back to its beginning (as in Logic, where the Absolute Idea circles back to pure Being), then the animal organism should find itself circling back to empty space and time—the quantum vacuum, perhaps—in order to set the stage for its leap into Spirit. Sex, death, and quantum physics would not be such strange bedfellows, after all.⁷⁹

Conclusion

By way of conclusion, I want to look back at the two debates with which we began, in light of the new account of the Nature-Spirit transition that I then went on to propose. In the Pippin-Žižek debate, Pippin maintains that there is no need for a philosophical account of the move from the space of causes (Nature) to the space of reasons (Spirit), since these are two incommensurable orders of explanation. Žižek argues that there is indeed a need for such an account, i.e. an ontological or metaphysical explanation of the birth of Spirit from out of Nature, subjectivity out of substance. I have argued in favour of Žižek's position here, where it is the decision of the animal through which the human being leaps from Nature into Spirit, which, like the prior decision of the Absolute Idea, takes place at an ontological level (a transformation in the very being of the human). While Pippin does admit that there would be a non-philosophical explanation of the human capacity for reasoning, to be found one day through some future advances in evolutionary biology, Žižek argues that this unspoken naturalist reductionism fails to do justice to the genuine break between Nature and Spirit. I have argued that the transition from Nature to Spirit—from substance to subjectivity, or from what Pippin takes to be the space of causes to the space of reasons—cannot be a merely natural transition. Just as the Absolute Idea's decision is not itself logical but the retroactive immanent overcoming of Logic as such, so too the animal's decision to become human is not natural but the retroactive immanent overcoming of Nature as such.

While Žižek and Johnston broadly agree on the need for a materialist reading of Hegel, in which we must explain how Nature is structured such that something like Spirit or subjectivity can emerge from it, they disagree on the most suitable natural science by which to determine this structure: quantum physics and neurobiology, respectively. On the one

hand, I have argued that there is something right about both views: while the biology of the animal organism is certainly the most advanced form of Nature and so the point at which the transition must be made to Spirit, still Nature must also circle back to its beginning, where quantum physics may also play a role. But on the other hand, neither quantum physics nor neurobiology could be a sufficient explanation for the birth of Spirit without once again reducing Spirit to Nature. Whatever preconditions may be laid by the quantum-physical incompleteness of material reality, or by the self-determining plastic feedback systems of the human brain, they cannot necessitate the decision of the animal without undermining that decision's proper undecidability. (Perhaps this is more in keeping with Žižek's occasional admission that quantum physics may be merely a metaphor or image of the more fundamental metaphysical principle of absolute negativity, which does not properly belong to Nature.⁸⁰)

Hegel has the difficult task of trying to 'square the circle', by simultaneously preserving both the difference and the continuity between Nature and Spirit. This philosophical desideratum is threatened on both sides by more straightforward traditional explanations of the Nature-Spirit relation. On the one hand, Hegel wants to avoid a reductionist physicalism that would collapse Spirit into Nature, turning Spirit into merely one more natural phenomenon among others. Does the decision of the animal avoid this? Someone might object: this decision is itself merely the product of physical causes, and so it does not truly break from Nature into a new domain of Spirit. A Hegelian reply to this objection would have to insist that this decision is not merely an effect of natural causes, but that there is something 'other' at work in Nature, e.g. absolute negativity. But this leads to the other horn of the dilemma, namely Hegel's desire to avoid a dualist supernaturalism, in which the continuity between Nature and Spirit would be lost, instead positing them as two radically distinct domains (e.g. Descartes' body and soul, or Kant's phenomena and noumena). Again, does the decision of the animal avoid this, if it must appeal to a non-natural metaphysical principle, e.g. absolute negativity? Someone might object: this has merely introduced a new dualism between Nature and what is 'other' than Nature—call it negativity, the Void, the 'less than nothing', etc.—which is both prior to Nature (Logic) and posterior to Nature (Spirit or subjectivity). A Hegelian reply would have to insist that there are not two separate realms here, but a single domain with an immanent contradiction. Either: There is only absolute negativity, which by negating itself, also yields a world of determinate positive entities that seems to be opposed to it, but are really its own expression Or: There is only natural substance, but this substance is incomplete or non-All, where the hole or gap thereby introduced in substance just is subjectivity itself. Whether this Hegelian position can ultimately be made philosophically satisfying remains an open question.

What are the political ramifications of these issues, if any? Allow me to only briefly indicate some of the correspondences between different interpretations of Hegel's transition from Nature to Spirit, and different interpretations of Hegel's political philosophy. Just as Pippin argues for the gradual evolution of the human faculty of reason from out of Nature, a process with which philosophy does not need to concern itself, he argues that Hegel endorses the gradual reform of one's own social-political world or form of life in accordance with its own internal normative standards.⁸¹ Just as Pippin is highly critical of Žižek's 'gappy' metaphysics (explaining subjectivity via the incompleteness or 'gap' in natural substance) as un-Hegelian, so too his is highly critical of Žižek's revolutionary leap or abyssal act as un-Hegelian.⁸² For his part, Johnston shares Žižek's commitment to a revolutionary political project emerging from the Marxist tradition, as read backwards through Hegel. But just as Johnston criticizes Žižek's recourse to quantum physics as an illicit 'shortcut' to subjectivity that fails to do the hard explanatory work of connecting Nature with Spirit, so too Johnston is critical of Žižek's political strategy of the abyssal act as an implausible 'shortcut' to a new world that fails to do the hard political work of building that new world from within the vestiges of the old. (Johnston offers a similar critique of Badiou's 'decisionism', as dependent on the miracle of an event that can neither be explained, summoned, or justified.) Instead, just as Johnston looks to the emergent biological structures of the brain to ground subjectivity, so too political transformation can emerge through whole networks of interventions—disrupting systems and structures, feedback loops, etc.—that are greater than the sum of their parts.⁸³ Finally, then, just as Žižek posits a quantum leap from Nature to Spirit, so too he argues that every political revolution requires just such a leap, an abyssal act. Indeed, a revolution first needs the 'de-naturalization' of the old world, which opens us up once again to the radical novelty of a new world. Likewise, on the account I have defended: just as the birth of Spirit out of Nature arises from the undecidable decision of the animal to break with the endless repetition of Nature and create something new (Spirit), so too the birth of a new world would require Spirit to make its own undecidable decision to transform itself into a new shape. After all, it is this drive for novelty that first pushes the Absolute Idea out from its own pure thinking into Nature, and then into Spirit, whose History is defined above all by the power of the new. By creating this new world, the Absolute Idea can come to enjoy itself once more as Absolute Spirit.

1 These categories are used here only for heuristic purposes, to capture the *de facto* divisions between different groups of contemporary professional philosophers. But with Badiou, from a strictly philosophical standpoint, I affirm “the nullity of the opposition between analytic thought and continental thought.” (Badiou 2005, xiv).

2 Hegel 1970, §§367-376.

3 For the purposes of this section, I will pay particular attention to what are often considered Žižek’s two most systematic and encompassing works, *Less than Nothing: Hegel and the Shadow of Dialectical Materialism* (Žižek 2011) and *Absolute Recoil: Towards a New Foundation of Dialectical Materialism* (Žižek 2014), and to Pippin’s important review essay of *Less than Nothing* (Pippin 2013; Pippin 2015).

4 For the purposes of this section, I will once again pay particular attention to *Less than Nothing* and *Absolute Recoil* (Žižek 2011; Žižek 2014), and to Johnston’s most significant engagements with Žižek: Žižek’s *Ontology: A Transcendental Materialist Theory of Subjectivity* (Johnston 2008) and *A New German Idealism: Hegel, Žižek, and Dialectical Materialism* (Johnston 2018).⁵

5 For Žižek’s critique of Hegel’s conception of sexuality, see e.g. Žižek 2012, 440-441. For Hegel’s account of marriage in the *Philosophy of Right*, see Hegel 2008, §§161-169. For Žižek’s critique of Hegel’s conception of death, see e.g. Žižek 2012, 455, 493, 500, 503.

6 Comay and Ruda 2018. For the motif of undecidability in Derrida and Badiou, see e.g., Derrida 2005, 218-220; Badiou 2005, 406-409.

7 Hegel 2010a, §244; Hegel 2010b, 752-753/12.253.

8 See e.g. Žižek 2012, 275, 963.

9 For an account of the distinctions between the traditional metaphysical view, non-metaphysical view, and revised metaphysical view of Hegel, see Redding 2020.

10 See e.g. Sellars 1997, 76.

11 Pippin 2013, 12, 16-7; Pippin 2008, 235-236.

12 Pinkard 2012, 17.

13 See e.g. Brandom 2019.

14 Hegel 1970, §250R.

15 Heisenberg 1927.

16 Žižek 2012, 905-962.

17 See e.g. Lacan 1998, 1-13.

18 For example, Žižek writes: “the disparity between subject and substance is simultaneously the disparity of substance with itself. ... [S]ubjectivity emerges when substance cannot achieve full identity with itself, when substance is in itself ‘barred’, traversed by an immanent impossibility or antagonism” (Žižek 2014, 29). See Hegel 2018, §§18-25.

19 Žižek 2012, 2, 112, 127, 233, 262, 774, 863, 963; Žižek 2014, 20-21. See e.g. Lacan 2007, 66.

20 On “materialism without matter,” see e.g. Žižek 2020, 6-7. See also Ruda 2015, 9, which is discussed in Žižek 2014, 72-74.

21 See Badiou 2005, 52-60; Meilllassoux 2008, 64-69. Among other shared features, Žižek’s absolute negativity, Badiou’s Void, and Meillassoux’s hyper-chaos all affirm the radical contingency of the material world, while at the same time rehabilitating the philosophical notion of the Absolute.

22 Pippin 2013, 12-13.

23 Žižek 2014, 17.

24 As Žižek explains Pippin’s view: “the distinction between nature and spirit therefore stems not from the fact that spirit is a thing of a different kind from natural things, but rather has more to do with the different sets of criteria that are required for explaining them: spirit is ‘a kind of norm’” (Žižek 2014, 18).

25 As Žižek writes: “Pippin seems to imply that the normative structure of recognition and discursive justification can ultimately be incorporated into a global natural history of humanity as a peculiar feature of one animal species, so that, even if the normative dimension remains irreducible to the empirical reality, it somehow emerged out of it *de facto*. This emergence is, however, never explicitly developed, since this would amount to a full naturalization of the normative-discursive dimension. Although Pippin is critical of Habermas, it would be easy to prove that Habermas’ neo-Kantian avoidance of ontological commitment is necessarily ambiguous in a homologous way: while naturalism functions as the obscene secret not to be revealed in public (‘of course man developed from nature, of course Darwin was right...’), this obscure secret is a lie, covering up the idealist *form* of thought” (Žižek 2014, 27).

26 Žižek 2014, 20; see Kant 1998, A445-451/B473-479.

27 “Aristotle’s books *On the Soul* [i.e. *De Anima*], along with his essays on particular aspects and states of the soul, are for this reason still the most admirable, perhaps even the sole, work of speculative interest on this topic. The essential aim of a philosophy of Spirit can only be to introduce the concept again into the knowledge of Spirit, and so also to disclose once more the sense of those Aristotelian books.” (Hegel 2007, §378, translation modified; see Aristotle 1984).

28 Hegel 1970, §240R.

29 See e.g. Heisenberg 1955. (Other interpretations of quantum physics may be deterministic, e.g. by positing so-called ‘hidden variables’ at work in quantum processes.)

30 For Žižek’s discussion of various phenomena of quantum physics, including the uncertainty principle, wave-particle duality, quantum indeterminacy, the observer effect, and so on, see e.g. the final chapter of *Less than Nothing*, “The Ontology of Quantum Physics” (Žižek 2012, 905-962). Žižek readily admits that the interpretations of quantum physics that he endorses—e.g. the probabilistic or indeterministic Copenhagen interpretation, a strong interpretation of the role of the observer, etc.—are scientifically controversial.

31 Žižek 2012, 944-950.

32 For some of Johnston’s major works on Žižek, see Johnston e.g. Johnston 2008, 2009, 2018. Like Žižek, Johnston has also had a back-and-forth with Pippin, but limitations of space require me to bracket this debate here (see Pippin 2018; Johnston 2019).

33 See e.g. Johnston 2018, 149, 172-175. Notably, Pippin also criticizes Žižek’s ‘gappy’ ontology as closer to Schelling than to Hegel (Pippin 2013, 10, 16-17). See Schelling 1997, for which Žižek contributes a long introductory essay. For Žižek’s reading of Schelling, see Žižek 1996.

34 “It has been rumored round the town that I have compared the stars to a rash on an organism where the skin erupts into a countless mass of red spots ... In fact I do rate what is concrete higher than what is abstract, and an animality that develops into no more than a slime, higher than the starry host.” (Hegel 1970, §341Z).

35 See Johnston 2018, 141-142, 174, 181, 185. For a general account of the distinction between strong and weak emergence, see e.g. Chalmers 2006.

36 For Kant’s view of the subjective requirement of teleological judgment with respect to biological organisms, see the Dialectic of Teleological Judgement in the third *Critique* (Kant 2000 257-284/5:385-415). For Hegel’s view of the objectivity of teleology and its relation to life, see especially the sections on Teleology and Life in the *Science of Logic* (Hegel 2010b, 651-688/12.154-12.191). For a general account of Hegel’s inheritance and transformation of Kant’s conception of teleological life, see Ng 2020.

37 Johnston 2018, 177-178.

38 See e.g. Johnston 2018, 166-183, 229-230. See also his collaboration with Catherine Malabou on philosophy, psychoanalysis, and neuroscience (Johnston and Malabou 2013). Malabou’s own work on plasticity in relation to both neuroscience and Hegel would deserve its own independent treatment, but limitations of space preclude such a discussion here (see e.g. Malabou 2005; Malabou 2008).

39 Johnston 2018, 210-211.

40 Hegel 2007, §378.

41 Žižek does occasionally make positive reference to neuroscience—e.g. Žižek 2004, 137-138; Žižek 2006, 240-241—but he does not accord it the same foundational role as quantum physics, even going so far as to posit that proto-subjective neurobiological processes are themselves made possible only by prior non-neurobiological ontological conditions (e.g. the ‘gap’ in Being itself). See the discussion in Johnston 2018, 165-184.

42 Žižek 2014, 225-226.

43 Žižek 2014, 226.

44 Žižek 2014, 226.

45 Žižek 2012, p. 440.

46 Hegel 2008, §§161-169. But even here things are not quite so simple, since Hegel describes marriage as a “decision [*Entscheidung*]” (Hegel 2008, §162R), which Žižek will even elsewhere call the “abyssal decision to marry” (Žižek 2012, 446).

47 “Žižek’s fundamental theoretical thesis equating the subject as negativity of German idealism with the death drive ... of Freudian-Lacanian psychoanalysis...” (Johnston 2018, xv). “What really interests me is the following insight: if you look at the very core of psychoanalytic theory, of which even Freud was not aware, it’s properly read *death drive* ... the only way to read this properly is to read it against the background of the notion of subjectivity as self-relating negativity in German idealism.” (Žižek 2003)

48 Freud 1959.

49 Žižek 2012, 500.

50 Žižek 2012, 500. See also: “This excess of the drive qua pure repetition is the “decentered” source of value that Hegel could not conceptualize, the libidinal correlate of the labor-power which produces surplus-value.” (Žižek 2012, 503). “In this sense, the death drive or the compulsion to repeat is the heart of negativity, Hegel’s non-thematized presupposition-inaccessible not only to him, but, perhaps, to philosophy as such.” (Žižek 2012, 493). “Hegel misses the excess of purely mechanical repetition.” (Žižek 2012, 455).

51 Hegel 1970, §369. Compare also: “the sex-relation: what the genus brings forth is the procreation of

individuals through the death of other individuals of the same genus; the individual, after reproducing itself as another individual, perishes." (Hegel 1970, §367Z); "The opposition of sex separates efficacy and stimulus, distributing them between two organic individuals. But the organic individual is itself both; and this is the possibility of its death, a possibility immanent in it, namely, that the organic individual itself separates itself into these forms." (Hegel 1970, §371Z).

52 For Hegel's explicit linkage between the bad infinite and repetition, see e.g. Hegel 2010b, 192/21.222, 596/12.98, 733/12.235.

53 Žižek 2012, 275-276. Note that Hegel calls the bad infinite the "infinite of the understanding," and the true infinite the "infinite of reason" (Hegel 2010b, 109/21.124).

54 In this regard, consider Hegel's frequent invocations of the Biblical narrative of the Fall of Man (Genesis 1-3), where it is the consumption of the fruit of the Tree of Knowledge that triggers humanity's recognition of its own sexuality (viz. Adam and Eve's nakedness), resulting in expulsion from the Garden of Eden and thereby the onset of death. Hegel interprets this religious narrative as representing the philosophical truth of the birth of humanity out of animality, or Spirit out of Nature (e.g. Hegel 2010a, §24Z).

55 This makes Hegel into a kind of inverted Platonist. In Plato's *Symposium*, Diotima describes the temporal cycle of sex and death as rendering humanity a mere image of eternity—changeable Becoming as opposed to unchangeable Being (Plato 1997, 489-491/206c-208b). Whereas for Hegel, the sex-death relation is itself a positive condition of the realization of Absolute Spirit.

56 Hegel 1970, §375.

57 Hegel 1970, §376.

58 Hegel 1970, §376z.

59 Hegel 2010a, §18.

60 Hegel 2010b, 735-736/12.236-237.

61 Hegel 2010a, §244; Hegel 2010b, 752-753/12.253.

62 "There is only present the decision [*Entschluss*], which can also be viewed as arbitrary, of considering *thinking as such*." (Hegel 2010b, 48/21.56, translation modified).

63 "The *Entschluss* can also be read as 'not-syllogism', 'not-inference', or 'un-syllogism', 'un-judgment', and 'un-conclusion. The resolve that drives thinking does not follow deductively; it is not the premise or the conclusion of a syllogistic inference. There can only be an *Entschluss* where inference fails and where thought is therefore impeded from continuing as before. Like the speculative sentence, the *Entschluss* is not a proposition (*Satz*), but rather a 'leap' (*Satz*) or reason. ... There is no *Entschluss* without undecidability, because only what is undecidable calls for a decision." (Comay and Ruda 2018, 110).

64 Gödel 1986.

65 The argument here is broadly adapted from Shaul 2023, 138-145.

66 For example: "The organism is thus raised into pure ideality, perfectly transparent universality; it is space and time, and at the same time neither spatial nor temporal: it intuits something which is spatial and temporal." (Hegel 1970, §357Z); "If, therefore, we began in Nature with the ideal asunderness of space and time, which are Two because the Notion is concrete (its moments are there in their completeness but they appear in that abstract sphere thrown apart, the content not yet having been posited in its concreteness); so we have now, on the one hand, the sense of physically determined space, and on the other hand, the sense of a physical time." (Hegel 1970, §358Z).

67 "The history of Spirit is its own act. Spirit is only what it does" (Hegel 2008, §343); "It is the very nature of Spirit to be this absolute liveliness, this process, ... to come to itself, and to free itself, it being itself only as it comes to itself as such a product of itself; its actuality being merely that it has made itself into what it is. ... [F]or it is only as a result of itself that it has being as Spirit." (Hegel 1978, 7). See also Žižek 2012, 291.

68 Badiou 2005, 391-431.

69 Hegel 2010b, 29/21.34.

70 As Hegel writes: "the difference between the spiritual world and the natural world ... consists in the fact that while the latter constantly only returns to itself, a progression [*Fortschreiten*] also takes place in the former." (Hegel 2010a, §234Z). As he explains more fully: "If we compare spiritual changes with those of Nature, we observe that, in the natural world, individual things are subject to change, whereas the species themselves are enduring. Thus a planet, for example, leaves each particular position it occupies, although its orbit as a whole is constant. And the same is true of animal species. For change is a cyclic process, a repetition of identical phases. Thus everything moves in cycles, and it is only within these, in the world of particular things, that change takes place. In Nature, the life which arises from death is itself only another instance of particular life; and if the species is taken as the substantial element behind this change, the destruction of particular things will appear as a relapse on the part of the species into particularity. Consequently, the survival of the species consists purely in a uniform repetition of one and the same mode of existence. But with spiritual forms, it is

otherwise; for in this case, change occurs not just on the surface but within the Concept, and it is the Concept itself which is modified. In the natural world, the species does not progress, but in the world of the Spirit, each change is a form of progress." (Hegel 1975, 128).

71 Badiou 2005, 123-142.

72 Hegel 2018, §11.

73 Of course, this still leaves the final transition from Spirit back to Logic, completing the circle of circles. Angelica Nuzzo suggests that, just as the Absolute Idea completes the circle of Logic *and* externalizes itself into something new (viz. Nature), so too Absolute Spirit must externalize itself into something outside the *Encyclopedia*'s grand circle of circles. But, so she argues, the only thing outside the *Encyclopedia* system is the *future* itself, about which Hegel insists philosophy must always remain silent. (Nuzzo 2018, 375-376). Without being able to develop it here, as I read Hegel, this extra-philosophical futurity just is a new world or new form of life.

74 Hegel 2007, §577.

75 "So, when Hegel concludes his *Encyclopedia* with the claim that "the eternal idea which exists in and for itself, eternally sets itself to work, engenders and enjoys itself as absolute spirit" ('*die ewige an und für sich seiende Idee sich ewig als absoluter Geist betätigt, erzeugt und genießt*'), does he not describe here a repetitive circular movement of alienating or losing oneself in order to regain oneself again, a movement which strangely recalls Lacan's definition of castration as a movement in which the object is lost in order to be regained on the ladder of desire? Is not the repetitive movement of losing and regaining oneself, of alienation and disalienation, a movement which, as Hegel explicitly claims, brings enjoyment, uncannily close to the circular movement of the drive?" (Žižek 2012, 498).

76 See e.g. Žižek 2012, 446, 503, 963.

77 "What the inexistence of the big Other signals is that every ethical and/or moral edifice has to be grounded in an abyssal act which is, in the most radical sense imaginable, *political*. Politics is the very space in which, without any external guarantee, ethical decisions are made and negotiated." (Žižek 2012, 963). As two scholars of Žižek nicely summarize it: "In politics, we need courageously to confront our capacity to engender wholly new political orders, completely overthrowing the old regimes. This will involve re-enacting collectively God's abyssal Act of decision, which saw him give birth to the world as his own self-externalization" (Sharpe and Boucher 2010, 122).

78 Consider the end of *The Dash*: "Philosophers have hitherto only *interpreted* the world. For Hegel the point is to *lose* it—to delete it, suspend it, destroy it, dash it to pieces—to refuse the world as we know it and create a new one. The point is to punctuate history—to get the point, to get to the point, to bring things to the point of transformation." (Comay and Ruda 2018, 112).

79 Perhaps the burgeoning field of *quantum biology* could provide the natural scientific buttress for a new Hegelian philosophy of Nature, in which Nature's highest shape (the animal organism) circles back to Nature's beginning (quantum physics). See e.g. Marais et al. 2018.

80 For example, after establishing the parallel between Hegelian ontology and quantum physics: "How far should we go with this parallel? Is it just an approximate metaphor? Does it bear witness to the fact that our entire comprehension of reality is already over determined by the symbolic order, so that even our grasp of natural reality is always already 'structured like a language'? Or should we risk a step further and claim that there is something which strangely recalls (or points towards) symbolic structures already present in 'physical' reality itself?" (Žižek 2012, 921).

81 Pippin 2013, 19-20.

82 "[T]he first sentence of Žižek's conclusion – 'What the inexistence of the big Other signals is that every ethical and/or moral edifice has to be grounded on an abyssal act which is, in the most radical sense imaginable, *political*' – makes zero Hegelian sense. Something understood by an agent as an 'abyssal' act is a delusion, the pathos of self-inflating and posed heroism, and the gesture belongs in the Hegelian zoo along with The Beautiful Soul, The Knight of Virtue and especially The Frenzy of Self-Conceit. And if the act is 'abyssal,' then 'politics' simply means 'power,' power backed by nothing but resolve and will, likely met with nothing but resolve and will." (Pippin 2013, 16)

83 For Johnston's critique of Badiou and Žižek in this regard, see Johnston 2009.

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