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Hans Jonas' Philosophy of the Organism

It is a significant fact that Jonas' work collecting his "philosophical biology," *The Phenomenon of Life*, is called in its first German edition *Organismus und Freiheit*, "Organism and Freedom," and indeed the notion of freedom plays a central role in the book, the general tenor of which Jonas already formulated in the letters he sent to his wife from the front while he was serving as a soldier during the War.² In one of these letters he writes, "With the concept of freedom, we have a guiding concept for the interpretation of life. . . . In this descriptive sense, freedom is therefore an ontological, foundational character of life as such." In a similar vein, we read in the introductory chapter of *The Phenomenon of Life*, "The concept of freedom can indeed guide us like Ariadne's thread through the interpretation of Life." In what follows we will examine this relationship between life and freedom in Jonas' thought more closely.

- 1. Jonas, Organismus und Freiheit.
- 2. Cf. Vogel, "Hans Jonas's Exodus," 2: "[Elinore] sent Hans the latest publications in biology, and Hans replied with two sorts of letters: . . . love-letters and teaching-letters. In the latter he sketched ideas that would form the heart of *The Phenomenon of Life*, to be published over twenty years later."
 - 3. Jonas, Memoirs, 226 (letter to his wife, dated March 31, 1944).
 - 4. Jonas, Phenomenon of Life, 3.

Toward an Ontology of Life

When hearing about a philosophy of the organism, one may think of something very particular and wonder about its relevance for philosophy as a whole. Here it is important to note that Jonas understands his philosophy of the organism not just as a little side-department of philosophy, but as a fundamental approach to ontology: "The problem of life, and with it that of the body, ought to stand in the center of ontology Life means material life, i.e., living body, i.e., organic being." In this way, following his teacher Heidegger, the question he asks himself is nothing less than "What is being?" Heidegger's approach in *Being and Time* was to turn to the being who is able to ask that question. For Heidegger the analysis of human existence or *Dasein* was the way to get at being-assuch. Yet Jonas points out that his teacher had "forgotten" to consider a very fundamental fact about human persons: they are *living* beings whose mode of existence is *corporeal*. 8

- 5. Ibid., 25.
- 6. Cf. Russo, *La biologia filosofica*, 27: "Substantially, the fragments which Jonas, in the form of essays and conferences, dedicates to the interpretation of the living constitute much more than episodes of a regional ontology. They are rather in-depth renderings of a true and proper *system* of the ontology of life as 'fundamental ontology,' in a sense that is *analogous* to the meaning that Heidegger has given to this expression in *Being and Time*" (translation my own).
- 7. Heidegger, *Being and Time*, 32: "Dasein itself has a special distinctiveness compared with other entities, and it is worth our while to bring this to view in a provisional way. . . . Dasein is an entity which does not just occur among other entities. Rather it is ontically distinguished by the fact that, in its very Being, that Being is an *issue* for it. But in that case, this is a constitutive state of Dasein's Being, and this implies that Dasein, in its Being, has a relation towards that Being—a relationship which itself is one of Being. And this means further that there is some way in which Dasein understands itself in its Being, and that to some degree it does so explicitly. It is peculiar to this entity that with and through its Being, this Being is disclosed to it. *Understanding of Being is itself a definite characteristic of Dasein's Being*."
- 8. Cf. Hans Jonas' critique of Heidegger in his essay "Philosophy at the End of the Century," 820–21: "Heidegger's concept of *Dasein* as "care" and as mortal is certainly more in keeping with our being's subjugation to nature than is Husserl's 'pure consciousness.' The adjective 'mortal' in particular calls attention to the *existence* of the body with all its crass and demanding materiality. And the world can be 'at hand' only for a being who possesses hands. But is the body ever mentioned? Is 'care' ever traced back to it, to concern about nourishment, for instance—indeed to *physical* needs at all? Except for its interior aspects, does Heidegger ever mention that side of our nature by means of which, quite externally, we ourselves belong to the world experienced by the senses, that world of which we, in blunt objective terms, are a part? Not that I know of."

Putting life at the center of ontology, Jonas remedies this oversight, but still chooses an approach that is similar to Heidegger's inasmuch as he makes use of a "descending ontology." Commenting on Jonas' remark that "man . . . [is] the supreme outcome of nature's purposive labor,"9 Jan Schmidt notes that "evidently, here Heidegger's descending ontology shines through. Heidegger did not understand nature in an ascending way, beginning from what is elementary to what is complex, as it is customary in the classical-modern natural sciences, but rather in a descending way, from what is complex to what is elementary. Hence, what nature is, is revealed most clearly in the human being—and not reductively in the atom." Asking the same question, then, as Heidegger—where does being reveal itself?—and using a similar method—going from what is more complex to what is more elementary—he nonetheless uses a very different approach by placing the living organism at the center of his reflections. The privileged *locus* of being's appearance is in the living organism, from the amoeba all the way to the human being. The fundamental question of any ontology worth its name thus has to be "What is life?" This is certainly not an easy question, and Jonas makes no pretensions to have answered it in an exhaustive way. Yet his phenomenological reflections may take us a long way and will help us to see what kind of freedom is proper to the organic being and how this freedom is inscribed into its very structure.

Panvitalism

In the opening article of *The Phenomenon of Life*, entitled "Life, Death, and the Body in the Theory of Being," Jonas begins by arguing that the first, in some way "natural" view of the world, held by our ancestors ages ago and perhaps still today enjoying currency among some isolated tribes, was animism or panvitalism: the world is alive.¹¹ Life and being are coextensive. The sun and the stars are no less alive than these stones, this dust, these plants, along with the lions and tigers and bears. In a world that is alive, death looms in as the great mystery.¹² The corpse is the inexplicable par excellence. The only solution to this mystery is to explain

- 9. Jonas, Imperative of Responsibility, 82.
- 10. Schmidt, "Die Aktualität der Ethik," 565n74, (translation my own).
- 11. Cf. Jonas, Phenomenon of Life, 7.
- 12. Cf. ibid., 8.

it away: death is not real; it is simply a rite of passage. As Jonas puts it, "Such a negation is the belief in a survival after death which primeval burial customs express. The cult of the dead and the belief in immortality of whatever shape . . . are the running argument of the life-creed with death."¹³

Dualism

At some point, particularly with the great cosmological discoveries, we arrive at a complete paradigm shift. The earth, sun and stars are certainly not alive. In the vast cosmos, in the vast expanses of space that the scientists have discovered, life is the absolute and extraordinary exception. In the context of this thought, as Jonas puts it, "Death is the natural thing, life the problem. From the physical sciences there spread over the conception of all existence an ontology whose model entity is pure matter, stripped of all features of life."14 The scientific method, which, with its use of analysis and measurement, sets the new standard for knowability, is much more adept at dealing with dead matter than with living things. 15 A living thing does not readily lend itself to analysis and mathematical description. While the lifeless can be readily known, the living is a puzzling and mysterious exception. In fact, "only as a corpse is the body plainly intelligible."16 In what Jonas calls the "ontology of death,"17 which is proper to the way modernity looks at the world, the almost all-encompassing rule is dead matter.

In this way, after his discussion of animism, Jonas traces the further development from dualism to two alternative monisms: materialism and idealism respectively. As panvitalism came to be regarded as untenable, an alternative had to be sought. In the search for a consistent world view in which death is the rule, one would have to seek to account for what is alive in terms of what is dead, or at least, in case there is a residual exception, account for latter. This is where dualism comes in. For the validity of any rule, it is convenient to reduce exceptions to the minimum possible. Descartes' efforts to understand animals as mere machines have to be

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13. Ibid., 9.
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^{14.} Ibid.

^{15.} Cf. ibid., 9-10.

^{16.} Ibid., 12.

^{17.} Cf. ibid., 11.

seen in this context. For him, animals act as if they had a certain inwardness, a certain subjectivity, but in the end they are mere automatons. 18 As Jonas puts it, according to Descartes, "All signs of pleasure and pain in animals are deceptive appearance, i.e., taken for such signs only by an unjustified inference from the habitual connection that in our case obtains between them and certain feelings." 19 For Jonas, "the gain of this tour de force lay in its confining the locus of inwardness in nature to the solitary case of man. Puzzling as it was there, it was an exception to the otherwise universal rule and left the rest of living nature free for purely mechanical analysis."20 In other words, Descartes' idea of the animal automaton helped him to have to admit of only one exception to the universal rule of lifeless matter, i.e., the being whose inwardness is directly given to me, and that is I myself in my own lived experience. Descartes then tried to account for this exception by introducing the split between res cogitans and res extensa, between the "thinking thing" and the "extended thing," that is, between the mind and the body.21 In the end, the body is a machine inhabited by a thinking thing, which is the only thing having "inwardness," even though one can no longer properly call it "alive." ²² Life is reduced to consciousness and thus explained away, while consciousness is reduced to some mysterious phenomenon that it seems can be bracketed when we are dealing with the scientific examination of the world. Jonas argues that this split of reality into two fields appears to be promising for the scientific treatment of these domains: "We then would have a phenomenology of consciousness and a physics of extension, and the method of one discipline would be as necessarily idealistic as that of the other materialistic. . . . Here the mutual relation of the two seems to be that, not of alternative, but of complementation: 'sciences of nature sciences of mind."23 It would seem that natural science has neither the

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18. Cf. ibid., 41.
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^{19.} Ibid., 55.

^{20.} Ibid., 55-56.

^{21.} Cf. ibid., 54.

^{22.} Ibid., 22: "If matter was left dead on the one side, then surely consciousness, brought into relief against it on the other side and becoming heir to all animistic vitality should be the repository, even the distillate of life? But life does not bear distillation; it is somewhere between the purified aspects—in their concretion. The abstractions themselves do not live. In truth, we repeat, the pure consciousness is as little alive as the pure matter standing over against."

^{23.} Ibid., 17.

need to affirm nor to deny consciousness. Its object is something else: matter that can be measured, analyzed, dissected and put together again, i.e., dead matter. Whether or not there is consciousness in the world does not appear to be a question natural science needs to ask; it purports to be neutral with regards to the issue.²⁴

Jonas maintains that nonetheless natural science cannot uphold this "agnostic" stance about consciousness for very long. Among its objects there is one that forces it to make a choice: the living body, which is both a material being and an entity that exhibits signs of inwardness. The living body testifies to the fact that the two fields ultimately are not separate and that they do not exist in separation from each other. As Jonas puts it, "The fact of life, as the psychophysical unity which the organism exhibits, renders the separation illusory. The actual coincidence of inwardness and outwardness in the *body* compels the two ways of knowledge to define their relation otherwise than by separate subjects."²⁵

The main problem of Cartesian mind-body dualism for Jonas is represented by the question of interaction. How do mind and body, which on this hypothesis are two different substances—and two substances of a very different kind—interact with each other? "Cartesian dualism created the riddle of how an act of will can move a limb, since the limb as part of the extended world can only be moved by another body's imparting its antecedent motion to it. Yet after learning from theory that it cannot be, we still go on feeling that we do move our arms 'at will." ²⁶As Jonas says, "Its forte from the point of view of corporeal science, the mutual causal unrelatedness of the two orders of being, was also its mortal weakness (of which 'occasionalism' was the clear confession)." Occasionalism is a philosophical construct that Descartes' followers developed to solve this problem, ²⁸ a problem of which Descartes himself was aware, but which he treated only unsatisfactorily by positing the point of interaction in the

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24. Cf. ibid., 54-55.
25. Ibid., 17-18.
26. Ibid., 61-62.
27. Ibid., 55.
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28. Cf. for instance the work of Nicolas Malebranche. "Ocassionalism states that all so-called 'second' or 'natural' causes are not true causes at all, but serve merely as occasions on which the true cause (God) operates. . . . Earlier Cartesians such as Cordemoy and La Forge had articulated semi-occasionalist positions, usually denying causal powers to bodies. It is only in Malebranche, however, that we find a full-blooded occasionalism, denying all causal powers also to finite spirits. Only God, for Malebranche, has the power to bring anything about" (Pyle, *Malebranche*, 96).

pineal gland.²⁹ The pineal gland is of course itself a material reality, so that reference to it is of no avail in solving the issue of how the immaterial mind and the material body can interact. Occasionalism tries to improve on Descartes by arguing that on the "occasion" of every movement of the mind, no one less than God himself supplies the movement of the body. This position is so fantastic that it ultimately amounts to admitting that dualism is untenable. It was of course not a totally new theory at Descartes' time. Thomas Aquinas, writing some four hundred year before him, already had the opportunity of providing a thorough theological and philosophical critique of this idea, which some Islamic philosophers had maintained for other reasons.³⁰

Dualism reduces life to consciousness and introduces into our understanding of reality the tension between mind and matter. With these two steps it creates problems that ultimately cause it to founder and to dissolve itself into a monism on either side of its polarity: idealism or materialism. Jonas puts it this way: "In the postdualistic situation there are, on principle, not one but two possibilities of monism, represented by modern materialism and modern idealism respectively: they both presuppose the ontological polarization which dualism had generated, and either takes its stand in one of the two poles, to comprehend from this vantage point the whole of reality."³¹ Thus, the options are either to understand everything as consciousness, and to say that what is experienced as matter is just one of its modes, or to claim that everything is matter and that what is experienced as consciousness, nay, the "experience" of experience itself, is just a mode of matter, an epiphenomenon.

Idealism and Materialism

Of the two monisms that are left behind after dualism's demise, idealism is the one to which Jonas gives short shrift. It is indeed a philosophical construct that is internally consistent and as such cannot be meaningfully falsified. But here is precisely its weakness. Though in itself consistent, it is inherently solipsistic. If all reality is ultimately consciousness or

- 29. Cf. Descartes, *Passions of the Soul*, 41: "And the activity of the soul consists entirely in the fact that simply by willing something it brings it about that the little gland to which it is closely joined moves in the manner required to produce the effect corresponding to this volition."
 - 30. Cf. Thomas Aquinas, Summa Contra Gentiles, Book III, Chapter 69.
 - 31. Jonas, Phenomenon of Life, 16.

mind, then the question arises of how different minds can be individuated or how they can interact. "Without the self-transcendence of the ego in *action*, i.e., in the physical dealings with the environment and in the attendant vulnerability of its being, the closure of the mental order is logically unassailable, and solipsism can appear as rational discretion instead of madness." If we begin with consciousness, we will not get out of consciousness. If all there is, is mind, then there will not be room for several things; I will always remain trapped within myself. As Jonas shows convincingly, however, the moment a solipsist argues this position, he or she falls into a performative contradiction, because by its very nature an argument presupposes the other to whom it is directed and whom it is meant to convince.³³

Materialism for Jonas is the intellectually more honest position because, in contrast to idealism, it is open to dialogue and philosophical discussion inasmuch as it is in principle falsifiable: "Materialism is the more interesting and more serious variant of modern ontology than idealism.... It exposes itself to the real ontological test and with it to the risk of failure: it gives itself the opportunity of knocking against its limit—and there against the ontological problem." It is to materialism, then, that Jonas devotes most of his attention. As a monism, materialism seeks to account for what we experience as inwardness, mind, or consciousness in terms of material causes. What seem to be mental states in their own right, such as anger, joy, love, conviction, and even thought itself, are nothing but epiphenomena of material states, i.e., phenomena that accompany material states but that themselves have no causal relevance.³⁵

Jonas' critique of materialism is twofold. First, he makes a very original argument that is meant to show how materialism violates some fundamental rules of natural science. Second, he demonstrates that one cannot argue for it without contradicting oneself in the act. As to the first, the phenomenon of the mind is an undeniable reality. We do have the experience of the mind, of thinking, willing, and feeling. Epiphenomenalism accounts for these experiences by claiming them to be byproducts of

^{32.} Ibid., 32.

^{33.} Cf. ibid., 32–33n5: "Not that anyone but a madman has ever taken solipsism *seriously*: arguing for it, except in soliloquy, is to acknowledge the 'other' whose consensus is sought. The argument is then frivolous, *qua* dialogue, while the absolute monologue is the madman's privilege."

^{34.} Ibid., 20.

^{35.} Cf. ibid., 127-28.

material processes. But even as byproducts of material states, these experiences are not nothing—which is shown by the very fact that one tries to account for them. They are something, namely, on that theory, the effects of material goings-on. However, by being completely reducible to their causes, these effects do not draw any energy from them, nor do they have any energy on their own, which means that they are denied any causal efficacy whatsoever. Thus, here we have the curious case of an effect that is caused without the deployment of energy and that unlike any other known effect is not itself the cause of anything else. This, Jonas argues, is a straight-out contradiction of a fundamental law of physics, namely the law of the conservation of energy. Epiphenomenalism is meant to "denote an effect which, unlike all other effects in nature, does not consume the energy of its cause; it is not a transformation and continuation of such energy, and therefore, again unlike all other effects, it cannot become a cause itself. It is powerless in the absolute sense, a dead-end alley off the highway of causality, past which the traffic of cause and effect rolls as if it were not there at all."36

With his second argument against materialism, Jonas does not definitively prove that materialism is false, but he nonetheless convincingly shows that materialism cannot be rationally proposed as a philosophical or scientific theory. By reducing mental states, including thoughts and convictions, to mere epiphenomena of material states such as chemical reactions in the brain, materialism denies the condition of the possibility of rational discourse and even of forming theories in the first place. Even scientists or philosophers who propose materialism as a valid worldview would like to do so because they are convinced that it is true. But if materialism were true, then any given conviction of theirs would be in no relation to its possible truth or falsity. They would simply have to think it true due to some neuronal processes in their brains. And yet, as they advance their position in rational discourse, they are convinced that they hold it true because they have arrived at it after rational reflection and not because they are determined to hold it true by some material reactions in their brains. In other words, materialism denies the possibility of

36. Ibid., 128. Cf. also Jonas' very succinct reformulation of this argument in a later essay that was introduced as appendix in his *The Imperative of Responsibility*: "Epiphenomenalism makes matter the cause of mind and mind the cause of nothing. But causal zero-value is compatible with nothing adhering to matter; and in particular it runs plainly counter to the idea of causal dependency itself that something dependent should be an end only (effect only) and not also in its turn a beginning (a cause) in the chain of determination" (Jonas, *Imperative of Responsibility*, 211).

rational argument. As Jonas puts it, "There is a logical absurdity involved in epiphenomenalism in that it denies itself the status of an argument by depriving any argument of that status. The present argument, no less than that against which it argues, is by this view the epiphenomenon of physical occurrences determined by necessities of sequence entirely foreign to 'meaning' and 'truth." 37 By entering in discussion with others and by trying to convince them, one assumes that others are open to rational argument and can very well be convinced (and not simply be caused) to change their positions. If the materialist position were true, however, this could not be the case. One might cause people to change their minds, for instance, by inducing certain substances or by threatening violence, but they could not be "convinced" by argument, unless of course one sees an argument as just another form of physical violence. Then there would be no qualitative difference between an argument and torture for example. On the materialists' own position, their conviction is instilled in them by physical causes; they could not hold their position because it is true but because they are caused to hold it by causes indifferent to questions of truth or falsity. "The only possible reference which the epiphenomenon may have to truth is the accidental agreement of its symbols with facts other than the cerebral facts carrying it, but there is no way on the part of those engaged in the argument, marionettes as they are to those necessities, to evaluate the issue on its merits, and thereby to decide between two alternatives, equal as they are in the factuality of their physical occurrence."38 For materialists, thinking or arguing cannot have any basis in inwardness and must hence be determined entirely by physiological facts. Their arguments therefore cannot claim any ground of validity. They are like "the Cretan declaring all Cretans to be liars." 39

Jonas' Attempt at a Solution

With what are we then left to understand the relation between body and mind? Jonas has effectively ruled out both dualism and monism under its forms of idealism and materialism: "In a universe formed after the image of the corpse, the single, actual corpse has lost its mystery. All the more does the one unresolved remainder clash with the universal norm: the

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37. Jonas, Phenomenon of Life, 129.38. Ibid., 129–30.
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^{39.} Ibid., 134.

living organism, which seems to resist the dualistic alternative as much as the alternative dualism-monism itself."40 Personally, we would like to note that philosophy at times runs into unanswerable questions because the questions it asks are put the wrong way or are already based on faulty assumptions. The possibility of answering the question raised may well turn around whether we formulate the difficulty in terms of the relation between body and mind or whether we set it up in terms of the relation between body and soul. It seems that only in the former case we run into true aporia. Putting the question in terms of the relationship between body and soul is difficult, especially if, like Aquinas, and perhaps even Aristotle, we want to hold for the possibility of the (human) soul's survival after the separation from its body in death.⁴¹ This soul, nonetheless, which in the case of humans is an intellectual soul—a soul that also thinks and understands—is the formal principle of the body. Here a solution is certainly difficult, but at least thinkable. The mind considered for itself by Descartes, on the contrary, is a principle that is completely foreign to the body, and to explain the interaction between mind and body will have to be impossible.⁴²

What, then, is the direction into which Jonas points us? For him, we need to take seriously the evidence of living things. The organism represented the problem that caused the failure both of monism, in its panvitalist and materialist versions, and of dualism:

The organic body signifies the latent crisis of every known ontology and the criterion of any future one which will be able to come forward as a science. As it was first the body on which, in the fact of *death*, that antithesis of life and nonlife became manifest whose relentless pressure on thought destroyed the

- 40. Ibid., 15.
- 41. Thomas Aquinas, Summa Theologica I, 75, 2; cf. also Aristotle, On the Soul, I, 1 and III, 5.
- 42. We can of course grant the pointed observation by Marleen Rozemond that Descartes did not invent dualism: "This problem is often treated as if it was new with Descartes's dualism because his view that the mind is incorporeal is usually approached as if new. But the incorporeity of the mind or the soul was surely not a novelty introduced by Descartes. In the history of Western philosophy it is at least as old as Plato—a fact often ignored in discussions of Descartes's dualism" (Rozemond, "Descartes on Mind-Body Interaction," 435. But whether the problem is formulated in terms of body-mind interaction or body-soul interaction would have to make a difference. Indeed, she goes on to say, "For the Aristotelian scholastics the soul was the form of the body, and in this regard they differed sharply from Descartes" (Rozemond, "Descartes on Mind-Body Interaction," 437).

primitive panvitalism and caused the image of being to split, so it is conversely the concrete unity manifest in its *life* on which in turn the dualism of the two substances founders, and again this bi-unity which also brings to grief both alternatives branching off from dualism, whenever they—as they cannot help doing—enlarge themselves into total ontologies.⁴³

Therefore, the organism needs to serve as the measure of any alternative proposal: "The living body that can die . . . is the memento of the still unsolved question of ontology, 'What is being?' and must be the canon of coming attempts to solve it." For Jonas such a proposal needs to go "beyond the partial abstractions ('body and soul,' 'extension and thought,' and the like) toward the hidden ground of their unity and thus strive for an integral monism on a plane above the solidified alternatives."44 Jonas' search for an "integral monism" that does justice to the phenomenon of life is a quest he set out on in a more systematic manner only toward the end of his life, particularly in the essays published in Mortality and Morality. In his article "Matter, Mind, and Creation: Cosmological Evidence and Cosmogonic Speculation," he makes explicit some of his thoughts on the coming to be of the cosmos and the nature of matter and mind that had hitherto been implicit in his thought.⁴⁵ In order to think of a monist solution to the problem, which nonetheless takes life seriously, he proposes to replenish and revise the concept of matter "beyond the external qualities abstracted from it and measured by physics; and this means, therefore, a meta-physics of the material substance of the world."46 This kind of matter must have carried within it from the very beginning, from the "Big Bang," if we want, "an original endowment with the possibility of eventual inwardness."47

We may wonder then whether at his heart Jonas is not a panvitalist after all. Robert Spaemann and Reinhard Löw claim they can find in Jonas' thought a subtle form of the theory of an organic "world soul," to which even the motion of the anorganic can be traced back.⁴⁸ And

^{43.} Jonas, Phenomenon of Life, 19.

^{44.} Ibid.

^{45.} Cf. Jonas, *Mortality and Morality*, 166: "I suddenly found myself drawn into my own cosmogonic speculations in which decades of thought about ontology and the philosophy of nature found expression."

^{46.} Ibid., 172.

^{47.} Ibid.

^{48.} Cf. Spaemann and Löw, Natürliche Ziele, 31, where, summarizing the panvitalist

indeed, when on different occasions Jonas tells the myth of a divinity that completely surrenders itself in the act of creation and ultimately puts its own destiny into the hands of its creatures,⁴⁹ we can get the impression that we are dealing with a type of world soul here.

At the same time, Jonas is critical of Alfred Whitehead's approach in claiming that it does not do justice to the *difference* between animate and inanimate things. Thus, Jonas writes, "Whitehead, who significantly called his general theory of being a 'philosophy of organism,' in effect turned the difference between life and nonlife from one of essence into one of degree." The gravest problem our author sees with Whitehead's take on the issue is that by blurring the distinction between living and non-living beings, Whitehead can no longer make sense of the phenomenon of death, which is to Jonas' mind, however, constitutive of the phenomenon of life. What life is, is fully revealed in its confrontation with death, and an account of life that essentially negates death cannot do justice to life either: "What understanding of life can there be without an understanding of death? The deep anxiety of biological existence has

position, they write: "Even the motions of the anorganic, which are never entirely without direction, are traced back to the organic principle of the world soul, which permeates the whole cosmos." In a note to this statement, they say, "This theory has a long tradition that dates back at least to Schelling (*Of the World Soul*, 1798), and which is present, in a most subtle way, also in Jonas" (262n30; translation my own).

In what follows we will make recurrent reference to the work of Robert Spaemann as a philosopher whose thought in many ways echoes Jonas' best insights. The affinity between the two is evidenced by the fact that when Jonas received the Peace Award of the German Book Trade, Spaemann held the *laudatio* (cf. Spaemann, *Schritte über uns hinaus*, 201–13).

^{49.} Cf. Jonas, *Phenomenon of Life*, 275: "In the beginning, for unknowable reasons, the ground of being, or the Divine, chose to give itself over to the chance and risk and endless variety of becoming. And wholly so: entering into the adventure of space and time, the deity held back nothing of itself." The result is that now "God's own destiny, his doing and undoing, is at stake in this universe to whose unknowing dealings he committed his substance, and man has become the eminent repository of this supreme and ever betrayable trust" (ibid., 274). See also: Jonas, *Mortality and Morality*, 131–43 and 188–92. In all these places Jonas insists that his intention is not to develop a systematic doctrine but to tell a myth the point of which is entirely speculative.

^{50.} Jonas, Phenomenon of Life, 95.

^{51.} Cf. ibid., 96: "While the polarity of self and world, as also that of freedom and necessity, is taken care of in Whitehead's system, that of being and not-being is definitely not—and therefore not the phenomenon of death (nor, incidentally, that of evil)."

no place in the magnificent scheme."⁵² Asked in an interview about the relation between mind and body, Jonas in fact refers to Whitehead, saying that, insofar as he posits feeling and inwardness as primary entities, his position "doesn't make much sense."⁵³

And yet again, it is hard to see how his own proposal is essentially different from Whitehead's when he maintains that matter, at its core, has something that is "more" than what natural science can get at. As long as life is not there, this "more" is not necessary for its description; however, matter "must have this something more so that, given the opportunity, life will come forth from matter, and with life will open up a dimension of subjectivity."54 Now when Jonas speaks about the "given opportunity," he implies some kind of potentiality, which in turn implies the possibility of motion. And here, together with Aristotle, we may ask whether the source of the movement is within the thing that has this potentiality or whether it is outside that thing.⁵⁵ In other words, are we speaking about a potentiality like that of an acorn, which, given suitable conditions, becomes an oak tree, i.e., an active potency, or is it the potentiality with which the oak tree, given a suitable outside intervention, can become a chair, i.e., a passive potency? If it is the former kind of potentiality, for which change and becoming is from an inner principle, i.e., from the nature of the thing, the change being the full realization of the thing's nature, then matter already needs to contain some of the reality proper to life, and Jonas' view would not be different from Whitehead's after all. However, if we speak of the latter kind of potentiality, then we will need to posit some extrinsic principle that brings the change about, leading us to fall back into a dualist position.

We see that coming up with a post-dualistic monism that is neither panvitalistic nor materialistic is very difficult, and we will have no ambitions to present or even develop such a position here. Jonas himself,

^{52.} Ibid., 96.

^{53.} Jonas and Scodel, "An Interview," 355: "It doesn't make much sense, though Whitehead did ask exactly that: What do molecules or electrons feel? How do they experience their being? According to Whitehead, they are experiences. Not only do they have them, but they are occasions of feeling. That's Whitehead's formula for the ultimate entities, I think he calls them. The most elementary entities are instances of feeling, and he in that respect comes close to Leibniz's Monadology: that the corporeality is a compound appearance of what is, in its true essence, somehow a mental event."

^{54.} Ibid., 356.

^{55.} Cf. Aristotle, Metaphysics, IV, 12.

it seems, did not convincingly manage to do so. Leon Kass comments that, measured against its grand ambition to present a post-dualistic view of life, "one which would again see each organism as a psychophysical unity," but which would at the same time "do justice to the specific difference and unquestionable superiority of the human animal," Jonas' book *The Phenomenon of Life* "can be hailed as only an incomplete success." And also when we look at Jonas' later writings, we cannot detect any substantial step beyond what he proposes there. Nonetheless, as Kass maintains, Jonas does point in the right direction. In fact, on the way to a full philosophical biology that is faithful to the phenomenon of life, Jonas does "establish some major triumphs," as he "succeeds in showing that and how every living organism is a psychophysical unity archetypically concrete, a grown-togetherness of organized outwardly perceivable matter and inwardly experienceable feeling-and-awareness. . . . He shows the necessity of teleologic notions for a true account of life." 57

To summarize then, did Jonas manage to present a consistent and convincing new ontology that supersedes the aporic alternative monism-dualism? It seems that he did not, even though it is his undoubted merit to have insisted that any such ontology needs to take the testimony of life seriously.⁵⁸ Did he develop a complete philosophy of life as a first step toward such new ontology? It seems that to this question, too, we must answer in the negative, even though he did point out some essential features of life, and this is, in the end, all he was setting out to do in the

^{56.} Kass, "Appreciating *The Phenomenon of Life*," 4. In our discussion of Jonas, we will make frequent references to Kass, since Jonas was his close friend and the two are among the founding Fellows of the Hastings Center on Bioethics, the first American "think tank" for bioethics (Cf. Kass, "Practicing Ethics," 5–12 and Jonas, *Memoirs*, 200).

^{57.} Kass, "Appreciating The Phenomenon of Life," 4.

^{58.} It seems that Robert Spaemann has followed Jonas' lead here, expressing himself in a very balanced way, but without sharing some of Jonas' hesitations: "That which is called 'being' in reference to materiality can in its turn only be understood from the viewpoint of the living. Only being which has the character of being a self is a possible object of benevolence and only for benevolence does being a self reveal itself. When the Psalms bid the sun and the moon, rivers and seas to praise God . . . these are powerful expressions of such universal benevolence, since these creatures praise God by being what they are. But it implies that their being is not merely an objective beingthere, but is a tendency, that is, that it is already 'concerned about something,' namely, its own potentiality for being, and that inanimate beings *make possible* something like involvement with themselves and are not just *passively* involved with living beings' (Spaemann, *Happiness and Benevolence*, 101).

first place, as, not without reason, his *The Phenomenon of Life* carries the subtitle *Toward a Philosophical Biology*. He never claimed to develop or to intend to develop a whole system.⁵⁹

The Fundamental Characteristics of the Organism

What then are the fundamental features of Jonas' philosophy of life, and how is life as he describes it related to freedom? As the most defining characteristic of life, Jonas proposes the metabolism. "Metabolism can well serve as the defining property of life: all living things have it, no nonliving thing has it." Life thus takes the form of the metabolizing organism, which is the quintessence of the Aristotelian substance. A connected characteristic mark of living beings is their inner teleology: because of their metabolic existence, "living things are creatures of need. . . . Need is based both on the necessity for the continuous self-renewal of the organism by the metabolic process, and on the organism's elemental urge thus precariously to continue itself." Insofar as they strive to maintain themselves in being, i.e., insofar as for them to be is to live, their being becomes

- 59. Jonas was not a system-builder. For this also see the testimony of his colleague at the New School, Richard J. Bernstein: "Jonas himself frequently emphasized the ambitiousness and tentativeness of his project. This is why he used *Versuch* and *Search* in the titles of his books" (Bernstein, "Rethinking Responsibility," 19).
 - 60. Jonas, "Burden and Blessing," 34-35.
- 61. See Robert Sokolowski, who in his "Matter, Elements and Substance in Aristotle," 265n6, gives a short review of several scholars on the matter: "Several recent commentators have observed that simple bodies are not substances 'in the full sense' for Aristotle: H. Cherniss, Aristotle's Criticism of Plato and the Academy (New York, 1962), pp. 255, 321, 328 ('living organisms, then, which alone according to Aristotle are in the strict sense substances . . . '); W. Ross, Aristotle's Metaphysics (Oxford, 1958), I, p. cxiv ('Living things . . . alone of all perishable things are in the full sense substance'); J. M. Le Blond, Logique et methode chez Aristote (Paris, 1939), p. 360, n. 4, puts it well when he says, 'les éléments sont plus des forces que des choses.' J. Owens, 'Matter and Predication in Aristotle, in The Concept of Matter, ed. E. McMullin (Notre Dame, 1963), p. 109, 'Earth, air, and fire, three of the traditional elements, do not seem to him to have sufficient unity in their composition to be recognized as substances.' E. Tugendhat, Ti kata tinos (Freiburg, 1958), pp. 84, 94, 97; E. S. Hating, 'Substantial Form in Aristotle's Metaphysics Z III, Review of Metaphysics, vol. 10 (1956–57), p. 311: 'The strong implication of Z is that only living beings, among perishables, and the imperishable heavenly beings . . . are material ousiai'; see also pp. 708-709."

For a more recent defense of the view that for Aristotle the "primary substances" are living organisms, see Gill, "Matter Against Substance," 379–97.

62. Jonas, Phenomenon of Life, 126.

an act and a task. They need to strive actively to keep themselves in existence and to maintain their life. Hence their being is marked by concern, and as such it is purposive, i.e., striving toward ends: "This basic concern of all life, in which necessity and will are bound together, manifests itself on the level of animality as appetite, fear, and all the rest of the emotions. The pang of hunger, the passion of the chase, the fury of combat, the anguish of flight, the lure of love—these, . . . imbue objects with the character of goals, negative or positive, and make behavior purposive." Therefore, it seems that for Jonas the defining characteristics of life are essentially two interconnected ones: the living beings' metabolism and their teleological structure. In what follows we will discuss both of these points and examine how Jonas relates them to freedom.

Metabolism and Freedom

A philosophical account of something as seemingly pedestrian as the metabolism may strike us as odd. Yet Jonas is fascinated by the metabolism and sees in it the very beginnings of freedom. What is it, and what is so special about it? Today it has almost become customary to speak of machines as if they were organisms and to see an analogy between the adding of fuel to a machine and the replenishing of an organism with nutrients, as when someone, requesting a full tank of gas, however jokingly refers to his or her car in endearing terms and says to the attendant at the station, "Just fill her up." Jonas claims that despite the strong prohibitions against anthropomorphism in the realm of nature, it is actually the scientists themselves who are the first to speak about machines in anthropomorphic terms: "Scientists, for so long the very abjurors of anthropomorphism as the sin of sins, are now the most liberal in endowing machines with manlike features."64 For him, the irony of this state of affairs is "only dimmed by the fact that the real intent of the liberality is to appropriate the donor, man, all the more securely to the realm of the machine."65 Thus, what we are actually doing is not thinking of machines as if they were organisms, but rather thinking of organisms, including human organisms, as if they were machines.66

- 63. Ibid., 126.
- 64. Ibid., 122.
- 65. Ibid.
- 66. In his essay "Life's Irreducible Structure," in which he argues that it is impossible

There are, however, crucial differences between a machine using up its fuel and a metabolizing organism "burning up," if we want, its nourishment. Jonas, arguing against Descartes, makes it clear that a "combustion theory of metabolism" is completely inadequate because "metabolism is more than a method of power generation, or, food is more than fuel." For Jonas these differences are at least two. First of all, the machine, as it is burning its fuel, remains essentially unaltered; the fuel enters the machine, where it is burnt. It leaves the machine's system again in a chemically altered form, but it does not do anything to change the system itself. The only changes that occur within the machine itself are due to normal wear and tear. This wear and tear is an unwanted side-effect that, at least in theory, could be eliminated without altering the machine's functioning; it is not part of the very purpose of the operation. What essentially changes in the operation is the fuel and not the machine.

Things are different with an organism and its metabolism: It is not only the "fuel" or nourishment that changes, but the organism itself. The nutrients enter into its very makeup. Its cells constantly die and are constantly renewed. Indeed, we are what we eat, as nutrition health professionals tend to teach us, and this is the case with every organism. Its cells are constantly changing. Thus Jonas writes about the role of metabolism, "in addition to, and more basic than, providing kinetic energy for the running of the machine (a case anyway not applying to plants), its role is to build up originally and replace continually the very parts of the machine. Metabolism thus is the constant becoming of the machine itself—and this becoming itself is a performance of the machine: but for such performance there is no analogue in the world of machines."⁶⁹ In other words, the system that is metabolizing is also the system that results from that process; it is built up and maintained by it. Hence, the object and the agent of metabolism are the same.⁷⁰

Precisely herein lies the phenomenon that Jonas finds so noteworthy: by its metabolism, the living being is the *process* of its own becoming,

to understand living things in terms of physics and chemistry, Michael Polanyi also testifies to this tendency in the natural sciences: "For centuries past, the workings of life have been likened to the working of machines and physiology has been seeking to interpret the organism as a complex network of mechanisms" (1308).

^{67.} Jonas, Phenomenon of Life, 76n13.

^{68.} Cf. ibid.

^{69.} Ibid.

^{70.} Cf. ibid.

combining identity with constant change. At any given point in time, the metabolizing organism is identical with its matter, but at the next point in time, its matter has already changed, while the organism is still the same. Sylvester is still the same cat today as he was three years ago, even though by now, due to his metabolizing activity, most of his body cells will have changed. But how can we still talk of identity? What is this kind of identity that cannot be based on matter, as it is precisely the material makeup that is constantly changing? Jonas speaks here of the identity of the living form over time: "In this remarkable mode of being, the material parts of which the organism consists at a given instant are to the penetrating observer only temporary, passing contents whose joint material identity does not coincide with the identity of the whole which they enter and leave, and which sustains its own identity by the very act of foreign matter passing through its spatial system, the living form. It is never the same materially and yet persists as its same self, by not remaining the same matter."71

What gives identity to the living being over time is not its material makeup, which keeps changing, but its form—which Aristotle called its "soul" and which has nothing to do with spirits or ghosts as Descartes' idea of the hypostasized soul inhabiting the body may easily suggest.⁷² For Aristotle the soul rather refers to the organism's principle of life,⁷³ that which makes the difference between a living dog and a dead dog, keeping in mind that strictly speaking a dead dog is no longer a dog. On this understanding of the term, not only humans but also cats and dogs and even plants have souls, which is just another way of saying that they are alive. Now, as Jonas expresses himself, this soul or form of the organism enjoys a certain independence from matter, namely with regards to

72. Contrasting Aristotle's view of the soul with a view of an unnamed source, but easily identifiable as Descartes' taken to its last consequences, Leon Kass writes, "[For Aristotle] the soul was not an ethereal spirit or a ghost-in-the-machine but an immanent and embodied principle of all vital activity" (Kass, *Life*, *Liberty*, 294).

For an insightful discussion of the notion of "soul" throughout the history of philosophy, see Spaemann, *Persons*, 148–63. For Spaemann, too, just like for Jonas and Kass, the main culprit for the soul's demise is Descartes: "Responsibility for the soul's precarious philosophical status rests chiefly with Descartes, who hypostatized it as an independent soul-substance, united obscurely with a material-substance to compose a human being by their combination. Kant brought weighty arguments to bear against the soul-substance theory, which he accused of 'paralogism'" (Spaemann, *Persons*, 148).

73. Cf. Aristotle, On the Soul, II, 1.

^{71.} Ibid., 75-76.

this matter.⁷⁴ It could also consist of other material parts and it soon will. That the organism now consists of precisely these molecules is accidental to it. It could also consist of other molecules, though of the *same kind*, but *materially different*, and soon it will. Hence we can speak of a freedom of the organism with regards to its matter. In fact, the "metabolism, the basic level of all organic existence, . . . is itself the first form of freedom."⁷⁵

This is the first difference between an organism with its metabolism and a machine with its combustion process: the organism with its living form enjoys a certain freedom in regard to its constituent matter that is unknown to any machine. Now there is a second important difference. Let us suppose a car runs out of gas. It will no longer work. So we put it in a garage and leave it there for a few years until we have saved up enough money to afford another fill. Most likely the car is going to start and work again, and if it does not do so immediately, it will be enough to deal with a few elementary problems, like recharging the battery, and it will be good to go. To put it in more general terms, a machine can run on its fuel, but it does not have to do so. As Jonas says, "It exists as just the same when there is no feeding at all: it is then the same machine at a standstill."76 The machine can have extended periods of inactivity, after which it will continue as before. It can be—and be inactive. An organism is very different. In its case, the "burning process"—by which it transforms matter into itself—is also a strict and urgent necessity, and hence, in order to maintain itself in being, it has to be active. For living beings, to be is to live,⁷⁷ and to live means to be in operation—at the very least: to metabolize. The moment their metabolism stops, they cease to live and hence cease to be. Here Jonas speaks of the "thoroughly 'dialectical' nature of organic freedom," namely the dialectics of freedom and necessity: "Denoting, on the side of freedom, a capacity of organic form, namely to change its matter, metabolism denotes equally the irremissible necessity for it to do so. Its 'can' is a 'must,' since its execution is identical with its being. It can, but it cannot cease to do what it can without ceasing to be."78 The living beings' freedom is bought at a price, the price of necessity. Their independence from this particular matter at any given point in

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74. Cf. Jonas, Phenomenon of Life, 81.
75. Ibid., 3.
76. Ibid, 76n13.
77. Cf. Aristotle, On the Soul, II, 4.
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78. Jonas, Phenomenon of Life, 83.

time, i.e., their freedom with regards to their constituent matter—which derived from their ability to enter into the metabolic exchange process with their environment—requires them to keep the process operative. The freedom of living things hence is a needful and precarious freedom.

In a very profound reflection, Jonas points out how with the dialectic of the organism's power and need—its ability to stand over and above material nature and at the same time its dependency on that nature—for the first time being appears in an emphatic sense. Only for living things, non-being is a real possibility and a real threat, so that with the appearance of death for the first time being is truly confronted with non-being. It is only the "living substance" that "by some original act of segregation, has taken itself out of the general integration of things in the physical context, set itself over against the world, and introduced the tension of 'to be or not to be' into the neutral assuredness of existence."79 Only here, in the confrontation with possible non-being, being "assumes an emphatic sense: intrinsically qualified by the threat of its negative it must affirm itself, and existence affirmed is existence as a concern."80 Insofar as organisms are not self-sufficient, their freedom is a precarious freedom. It is from their environment, which may or may not be accommodating, that they have to retrieve the material sustenance which they need for their survival, a survival that thus itself becomes a task and hence a concern.

It is important to note that for Jonas the organism's "existence as concern" is not only marked by the dialectics of freedom and necessity, but also by a transcendence and relationality. Jonas puts it this way, "Life is essentially relationship; and relationship as such implies 'transcendence,' a going-beyond-itself on the part of that which entertains the relation." The organism is to an extent free from this matter and hence in need to be in constant exchange with matter for which it must go out of itself and be in constant contact and interchange with its environment. Because of its freedom, the organism is needful, and because of its need, it is relational and self-transcending.

^{79.} Ibid., 4.

^{80.} Ibid. We note how here Jonas is enlarging the Heideggerian concept of "concern" as the mode of existence not only proper to human *Dasein* but proper to the entire realm of the living.

^{81.} Ibid., 4-5.