

Why Turn to Hegel Today? An Introduction



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Abstract: This brief introduction sets the stage for the central aim of this issue of *Ethics in Progress* devoted to Hegel: to underscore the enduring relevance of his thought, in particular his Philosophy of Nature and his *Realphilosophie*, in addressing contemporary challenges. While Hegel may appear to some as an abstract thinker, seemingly surpassed by the demands of our era, the core elements of his philosophy – particularly the dialectical method, his reflections on the complex relationship between *Natur* (nature) and *Geist* (spirit), and key concepts such as *Anerkennung* (recognition) and *Wille* (will) – continue to provide a vital conceptual framework for addressing pressing issues of our time. These include the environmental crisis and the evolving dynamics between humanity, nature, and emerging technologies like artificial intelligence. Consequently, this issue strives to approach Hegel through the lens of our contemporary experience, not to distort or "denaturalize" his thought, nor to fall into the trap of anachronism, but to *breathe new life into the concept*. By doing so, it invites the reader to listen anew to what Hegel's philosophy might still teach us today.

Keywords: Hegel; Philosophy of Nature; Realphilosophie; environmental crisis; artificial intelligence.

This issue of *Ethics in Progress* is grounded in the conviction that engaging with Hegel today remains a meaningful endeavor¹. Exploring whether Hegel's thought and its extraordinarily rich conceptual framework continue to provide tools for navigating the complexities of the contemporary world requires a delicate balance: drawing on Hegel's profound insights while safeguarding the integrity of their originality and specificity, rather than anachronistically adapting ideas that, in certain respects, inevitably bear the imprint of their historical context. Instead, the objective is to *breathe new life into the concept*, demonstrating how Hegel's philosophy can serve as a dynamic framework for addressing

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some of the most pressing challenges of our time², including the environmental crisis and the evolving interplay between humanity, nature, and transformative technologies such as artificial intelligence. We live in an era of profound and delicate transformation – a time of crisis on many fronts, demanding a fundamental reexamination of core categories and relationships, particularly those between humanity and nature, as well as between humans and nonhuman entities.

In light of the considerations outlined above, the contributions in this issue critically examine these very relationships, engaging with them through the lens of Hegel's philosophy. They approach this task, first, by delving into Hegel's Philosophy of Nature from the Jena period (and even beyond), a phase in which he articulated pivotal insights through a critical engagement with the natural sciences of his time. Additionally, they engage with Hegel's *Realphilosophie*, particularly examining the concepts of free will and recognition. It is, in fact, during the Jena period that Hegel begins to articulate the intricate relationship between nature and spirit in a way that lays the groundwork for this foundational aspect of his philosophy (Erle, *infra*; Palombelli, *infra*). On the one hand, Hegel conceives of nature as the "other" of spirit – a necessary stage in spirit's process toward itself and the attainment of absolute knowledge. On the other hand, nature is not simply negated in the process of spirit's self-realization but it continues to play an essential role within the spiritual domain.

It is also in Jena that, through engagement with contemporary biological discoveries, Hegel starts developing a holistic and biological conception of life that transcends a purely mechanistic perspective (Hegel 1975; Hegel 1976).³ This approach enables him to establish a profound interconnection between life and thought, wherein the biological theories of his time significantly inform the development of his speculative philosophy (Achella, *infra*; Achella 2019).⁴ Exploring the relationship between Hegel's Philosophy of Nature and the natural sciences of his time also serves as an opportunity and a starting point to examine its potential for contemporary science, prompting the question of whether Hegel's ideas still hold relevance today (Arredondo, *infra*). Hegel's critique of the scientific approach, which reduces nature to a mere object of manipulation,

² I myself have used this method to deal with the sensitive topic of resistance, starting with Hegel's philosophy (Battistoni 2022).

³ This was the time of new discoveries in the field of chemistry, physiology and biology, which influenced a dynamic, processual view of nature as nature alive, as a *Weltorganismus* (world-organism). The common most demanding effort of philosophers and scientists of that time thus became understanding life and the processes of the living organism, as well as its growth and the transition from inorganic to organic nature.

⁴ As is well known, Hegel's Philosophy of Nature was long dismissed as outdated. It experienced a resurgence of interest beginning in the 1970s and 1980s (see, at least, Wandschneider 1982; Breidbach 1982; Horstmann & Petry 1986; Petry 1987; Illetterati 1995; Vieweg 1998, the latter focusing on Hegel's Jenaer Philosophy of Nature) and, more recently, this revival has been marked by studies that focus particularly on Hegel's conception of the living organism and of nature as a living whole, as well as its influences on 20th century biology and philosophies of the organisms like those of Hans Jonas and Alfred N. Whitehead (on this, see at least, Erle 2024; Corti & Schülein 2023; Battistoni 2023b; Franzini Tibaldeo 2009; Jonas 2001).

remains in particular relevant even today and a holistic and dynamic vision of reality, as well as a philosophical understanding of nature in which humanity and nature are deeply interconnected, seems particularly pertinent for tackling contemporary challenges within environmental ethics.⁵

While invoking a philosophy of nature in the present time might appear anachronistic, it is worth recalling that as recently as 1993, Hans Jonas, in a lecture delivered in Munich, lamented a significant shortcoming of 20th century philosophy: it was exactly the absence of a Philosophy of Nature. For Jonas, a Philosophy of Nature – a philosophical biology, to use his own words – capable of overcoming the dualisms entrenched in modernity had to be an essential part of any philosophical system. Although Jonas was critical of and diverged from Hegel in many respects, it is undeniable that his philosophical biology is profoundly idealist in intent and bears roots that are, if not explicitly Hegelian, certainly aligned with Hegelian thought.⁶ After all, the philosophy of nature in the 20th century, and even today, finds itself in a "disadvantageous position" remarkably similar to the one Hegel described in his own time (Hegel 2012).

Exploring the relationship between human beings and nature raises fundamental questions about the very nature of the humans themselves (Wilford, Anderson, Loebs, *infra*) as well as their capacity for self-determination and action. This means investigating the conditions that enable free action – conditions that arise even before the formation of the social context and the corresponding normative framework for attributing actions to an agent (Tereshchenko, *infra*). At the same time, it prompts reflection on the specific relationships of recognition and respect to which we are increasingly called in our time - not only toward other human beings but also toward non-human entities, including nature on the one hand, and emerging technologies on the other (Juchniewicz, *infra*). This presents a profound challenge to Hegelian conceptuality, inviting a critical examination of its relevance in addressing these pressing contemporary concerns. Once again, it is the Jena period, and here specifically the Jenaer Realphilosophie (Hegel 1969), that provides valuable insights. In this context, the human will is understood as the foundation of individual free action, forming the basis for the mature conception Hegel would later articulate in the *Elements of the Philosophy of Right* (Hegel 1991). Furthermore, in the *Realphilosophie*, the theme of recognition is explored with particular attention to the ethical, normative framework, laying the groundwork for interpretations like that of Axel Honneth, who also questions the meaning of misrecognition (Honneth 1995)⁷, and for revisiting the concept of recognition making it applicable to the context of technologies.

Consequently, the contributions presented below represent a significant dialectical

⁵ In the 20th century, Hans Jonas sought to ground the ethics of responsibility in a philosophical biology (see Jonas 1985; Jonas 2001).

⁶ I cannot delve into these ideas in depth here, but I have explored them (further in Battistoni 2023a; Battistoni 2023b; Battistoni 2024; see also Jonas 2015).

⁷ Achella (2024) offers a recent and insightful attempt to examine the contemporary "pathologies of recognition" through the lens of Hegel's philosophy.

effort: they seek to offer tools, rooted in Hegel's philosophy, to critically engage with and challenge the dualisms that continue to shape contemporary thought (such as spirit/ human versus nature, and human versus nonhuman). These dualisms underlie the ecological crisis and a problematic relationship with the nonhuman world in general. In the following, the contents of the contributions included in this issue will be briefly presented.

Marco Palombelli's article Hegel on Human Ways of Considering Nature investigates the limitations and contradictions of common approaches to understanding nature, drawing on Hegel's Encyclopaedic Philosophy of Nature and Berlin Lectures. Central to this exploration is the relationship between nature and spirit, a theme rooted in Hegel's writings in Jena. Nature, described as the "other" of spirit, plays a pivotal role in spirit's self-realization, ultimately revealing itself as an integral part of this process. Palombelli examines two primary approaches to nature: the practical and the theoretical. The practical approach, driven by the human need to consume nature for survival, reflects a utilitarian and destructive perspective that reduces both nature and humanity to mere biological functions. This external teleology, where humans impose purposes on nature, fails to recognize the intrinsic value of natural processes. The theoretical approach, aligned with empirical sciences of Hegel's time, abstracts from nature's particularities to uncover universal principles. While more advanced, it too manipulates and reduces nature, remaining bound to a fragmented view of reality. To address these shortcomings, Hegel advocates for a speculative, philosophical approach that perceives nature as a living, interconnected whole. This philosophical intuition reveals nature's inner rationality and inherent freedom, overcoming the separation between nature and spirit. By uniting the singular and the universal, thought discovers itself in nature – its apparent "other." Palombelli argues that such a philosophical understanding is particularly urgent in times of crisis, as it allows for the redefinition of humanity's relationship with the environment. Hegel's vision, which synthesizes the practical and theoretical approaches, liberates both nature and spirit from their one-sided constraints. This creates a framework for a harmonious coexistence where the conceptual grasp of nature aligns with its living essence, affirming the relevance of Hegel's ideas in addressing modern ecological and ethical challenges.

Paul Wilford, Nicholas Anderson, and John Loebs' article *The Wonders of the World and the Wonder of Man: Sophocles' Ode to Man in Hegel, Heidegger, and Jonas* also focuses on the human relationship to nature, establishing a productive long-distance dialogue between Hegel's, Heidegger's, and Jonas' interpretations of the "Ode to Man" from Sophocles' *Antigone* as a starting point. The article focuses on how humans perceive, master, and are constrained by nature. It argues that an adequate understanding of nature requires an equally adequate comprehension of the subject that apprehends it – namely, the human being. Hegel criticizes the knowledge model of modern science, which he argues reduces nature to an object of manipulation. For Hegel, a purely practical perspective that emphasizes human mastery fails to recognize both the intrinsic integrity of natural beings and spirit's emergence from nature. Hegel's speculative philosophy conceives of nature as a living whole, where spirit liberates itself by discovering its essence within nature. Through this process, nature itself is liberated from externality. Consequently, Hegel advocates for a philosophical approach that reconciles spirit and nature. Heidegger's interpretation of the "Ode to Man," presented in Introduction to Metaphysics, explores the ground of human existence and the nature of being. Drawing on the Greek tradition, Heidegger emphasizes humanity's "unhomeliness": humans are the "most unhomely" due to their violent attempts to impose techne on a resistant physis. Jonas, in The Imperative of Responsibility, extends Heidegger's critique to the technological excesses of modernity. He argues that modern technology disrupts ethical frameworks and necessitates a new ethics grounded in responsibility. This ethics, according to Jonas, entails recognizing humanity's immense power and its role in preserving nature. Building on a philosophical biology, Jonas advocates for an ethics that values life in itself, acknowledging humanity as both part of and distinct from nature, in which a first kind of freedom and inner teleology is already evident. The "Ode to Man" serves as a bridge between these three thinkers, exposing the limitations of a purely practical or mechanistic approach to nature. Together, they offer complementary insights into the evolving dynamics of humanity's complex relationship with the natural world. Wilford, Anderson, and Loebs conclude their article by reflecting on contemporary neuroscience, contrasting the mechanistic perception of the left brain with the holistic view of the right brain. Drawing on McGilchrist (2019), they suggest that modern alienation and environmental crises stem from an overemphasis on the left brain's perspective at the expense of the integrative capacity of the right brain. By engaging in dialectical thinking, the article seeks to balance these perspectives, integrating insights from Hegel, Heidegger, and Jonas to reimagine humanity's place within the natural whole.

Stefania Achella's article *Life as Paradigm of Knowledge. What Use of Hegel in the Age of the Environmental Crisis?* begins exactly with the given fact that the environmental crisis necessitates a profound rethinking of humanity's relationship with the environment, requiring a move beyond the model of human supremacy. Drawing on Hegel's thought, the author examines how the normativity of organic life, as revealed by the natural sciences of Hegel's time, shaped his speculative philosophy. Achella begins by analyzing the 18th-century shift from a physics-based worldview to a biology-centered one. This paradigm shift, exemplified by Newton's idea of oppositional dynamism and Goethe's insight that the principle of knowledge of living beings must be sought in life itself, highlighted the need for a dynamic understanding of life. Achella also argues that this shift deeply influenced Hegel's understanding of reason: for Hegel, reason operates immanently, having its purpose within itself, much like life, which, therefore, becomes a model for understanding reason, bridging scientific and philosophical perspectives. Achella thus emphasizes that Hegel's idealism incorporates life's relational structures into its framework, transcending artificial separations such as subject-object (as explored in the *Phenomenology of Spirit*)

or nature-spirit. Hegel's critique of the methods of the empirical science culminates in a holistic ontology, where nature and spirit are intertwined and mutually constitutive. Achella thus identifies Hegel's philosophy as a form of "living ontology" that evolves with reality, offering a relational framework for addressing the environmental crisis. She also argues that Hegel's thought aligns with feminist ecological approaches by overcoming key dualisms – human and non-human, soul and body, and nature and culture. This nonanthropocentric yet human-sensitive perspective preserves both human specificity and interconnectedness, offering a conceptual foundation for rethinking humanity's place in nature. In this way, Achella positions Hegel's philosophy as a critical resource for developing new relational approaches to environmental thought in the Anthropocene.

Xavier Aranda Arredondo's article Is a Contemporary Hegelian Philosophy of *Nature Possible?* explores the relevance of Hegel's Philosophy of Nature in relation to contemporary philosophy of science. Arredondo begins by emphasizing how Hegel's Philosophy of Nature is inseparable from his broader system, where nature emerges as a manifestation of the Idea (Idee), first developed in the Logic section of the Encyclopaedia of the Philosophical Sciences. Hegel's system operates through a dialectical structure, with logic as the universal, nature as the particular, and spirit as the singular. These elements interrelate, forming an evolving and unified whole. The author highlights how Hegel's approach addresses dualisms, such as the separation of conceptual schemes and the empirical world. Starting from the Phenomenology of Spirit, Arredondo examines Hegel's epistemological premises, including the existence of objects independent of selfconsciousness and the identity of thought and reality in a common ground. By analyzing the Science of Logic, he argues that Hegel transcends traditional distinctions between a priori and a posteriori, favoring a position where immediacy and mediation are part of a dynamic, more neutral framework. Central to the discussion is the demarcation of scientific knowledge: the process of rational reconstruction, mediated by the Idea, grounds the possibility of scientific objectivity. The Philosophy of Nature, like Hegel's Logic, does not treat empirical science as absolute but as immediate, showing that its conceptual structure derives from logical mediation. Arredondo then connects Hegel's ideas to contemporary concerns, such as Einstein's critique of reducing reality to quantifiable properties and the challenges quantum physics poses to traditional ontological principles. According to the author, Hegel's Absolute Idea provides a framework to integrate the universal and particular, addressing such philosophical tensions. By applying abductive reasoning, Arredondo proposes that Hegel's Philosophy of Nature offers solutions to fundamental issues in the philosophy of science, bridging gaps and inviting dialogue between Hegelian thought and modern scientific inquiry.

Giorgio Erle's article *Natural Becoming: From Bad Infinity Towards an Open Dialectic? Contemporary issues moving from Hegel's Philosophy of Nature* makes use of dialectics to interpret Hegel's Philosophy of Nature as part of his larger system, conceived as a dynamic and interconnected organism. The author first focuses on the relational

roles of time and space. According to Erle, time and space are mutually dependent: time, as a negative, indistinct quality, and space, as a negative, indistinct quantity, remain inert without their interaction. For Hegel, natural time functions as the engine of "bad infinity," a repetitive cycle devoid of determination or diversity. This static ideality is overcome through mediation, where time and space become concrete and are integrated into organic processes, such as metabolism. At this stage, natural becoming develops into a form of subjectivity – though one that cannot achieve self-consciousness, as nature lacks the capacity to narrate itself, remaining an "externality." Erle argues that Hegel's natural processualism provides a framework for an "open dialectic," where the Philosophy of Nature points beyond itself, connecting to broader spiritual and ethical dimensions. Drawing on Hans Jonas, Erle emphasizes that nature's fragility - evident in phenomena such as an animal's struggle for survival and to find food - reveals life's capacity to endure negativity and transform it into mediation. Metabolic processes, for instance, demonstrate how life unifies externality within itself, transforming fragility into strength. Through natural becoming, contradictions give rise to possibilities for renewal, where even failure drives the subject to transcend negativity. Thus, Hegel's Philosophy of Nature remains highly relevant, offering an "open dialectic" that unites nature, ethics, and spirit in a mediated continuity. For both Hegel and Jonas, nature's limitations thus serve as a gateway to spirit, with mortality acquiring profound metaphysical and ethical significance, prompting reflection on the kind of world humans wish to create and sustain, including considerations of environmental responsibility.

Yuliia Tereshchenko's article Intelligent Will, Causality, and Action in Hegel's Jenaer *Realphilosophie 1805/06* explores the foundational role of Hegel's early work in developing his theory of action. As Tereshchenko shows, in the Jenaer Realphilosophie the subject with an individual mind uses nature's causality and external objects to actualize its will, demonstrating the capacity for free, intentional action independent of a fully developed social framework. While individual action occurs within social conditions, the author claims it is, in essence, pre-social, rooted in the self-regulating intelligence and will of the subject. Thus, the author contrasts her view with neo-Hegelian interpretations, such as those of Robert Pippin and Katerina Deligiorgi, who emphasize the social determination of agency. Tereshchenko turns instead to John McDowell's argument that agents can understand their own intentions without relying entirely on social practices. This allows for free action grounded in an autonomously formulated reason. Tereshchenko examines Hegel's Jenaer Realphilosophie, where intelligence and will are seen as core faculties of the mind. Intelligence is tied to memory and language, while the will ensures control over external reality to satisfy natural needs. Hegel describes the will's process as starting with a drive that expels its content (otherness) and experiences lack, eventually achieving satisfaction by intervening in nature to fulfill its purpose. This progression begins as unconscious activity but evolves into conscious action, where practical intelligence and the will integrate internal and external world. Hegel avoids separating subjective intentions

from objective deeds, since the outward manifestation of the will becomes a subjectiveobjective reality. Tereshchenko concludes that the development of the individual mind is the foundation for free action. While the moral and ethical dimensions of action eventually require recognition of others, these social elements arise later and are not the essence of action itself.

Natalia Juchniewicz's article Towards (Unilateral) Recognition of "the Technological *Other" – Vulnerability, Resistance and Adequate Regard* examines whether the theory of recognition can be extended to human-technology relationships. Drawing on Hegel and Honneth, the author reconstructs recognition theory as a normative framework centered on building relationships based on mutual respect. For Hegel, recognition is essential for self-development, while Honneth's three dimensions of recognition - love, law, and solidarity – focus on ethical relationships within social structures, grounded in human equality. While Hegel's Phenomenology of Spirit emphasizes recognition as part of selfconsciousness formation, the ethical life outlined in the Jenaer Realphilosophie aligns more closely with the recognition model Honneth explores. Misrecognition, as Honneth notes, also shapes these dynamics, a concept the author finds particularly relevant for technology. The article also questions whether recognition necessarily requires consciousness and explores the possibility of extending recognition to non-human entities like robots. By redefining recognition as the capacity to evoke moral obligations, the author challenges anthropocentric assumptions. Incorporating Nolen Gertz's idea (Gertz 2018) of solidarity with technological artifacts, Juchniewicz notes that such solidarity arises from technology's integration into human roles, fostering emotional bonds through projection. More importantly, she focuses on the concepts of vulnerability and resistance, arguing that technology, despite lacking mortality or embodiment, can still be seen as vulnerable and resistant, thereby eliciting moral responses. Vulnerability, framed as the capacity to provoke ethical action, repositions technology as a moral agent without necessitating personhood. Finally, the article discusses the model of "adequate regard," a form of unilateral recognition where non-human entities, though unaware, influence moral behavior in humans, evoking emotions and ethical obligations. This reimagining of recognition theory highlights a relational model in which human sensitivity and empathy extend beyond humanity. Ultimately, Juchniewicz revitalizes recognition theory, demonstrating its relevance in a technological world where relationships with nonhuman entities reshape ethical considerations.

In conclusion, the articles in this issue collectively trace a path from Hegel's speculative philosophy of nature and spirit to the challenges of our contemporary world. United by the common effort to look at his thought through the lens of our present, they affirm that the thinker of the dialectical relation between nature and spirit, as well as of the recognizing relation between human beings, continues to offer profound conceptual tools to critically address the pressing questions of our time.

References

Achella A. 2023. "Patologie del riconoscimento e forme di responsabilità", in G. Battistoni & G. Erle (Eds.), *Responsabilità, comunità e comunicazione: dalla filosofia moderna all'etica contemporanea, Pòlemos. Materiali di filosofia e critica sociale* 1:61–77. http://doi.org/10.48247/P2023-1-004

Achella S. 2019. Pensare la vita. Saggio su Hegel. Bologna: il Mulino.

Battistoni G. 2024. "Einsichten für die gegenwärtige Umweltethik: Romantik, Hegel, Jonas", in M. Lewin (Ed.), *Klassische Deutsche Philosophie: Wege in die Zukunft* (pp. 211–228). Paderborn: Brill/Mentis. http://doi. org/10.30965/9783969753002_012

- Battistoni G. 2023a. "A Biocentric Ontology at the Basis of an Anthropocentric Concept of Co-responsibility to Non-human World," *Filosofia Morale/Moral Philosophy* 2(4):101–110. http://doi.org/10.7413/fmmp0038
- Battistoni G. 2023b. "Lebensprozess e organismo vivente. Elementi di contatto tra le filosofie della natura di Hegel e Whitehead attraverso Jonas", in A. Giacone & L. Vanzago (Eds.), *Hegel e Whitehead, Giornale di Metafisica* 1:59–72.
- Battistoni G. 2022: "Fondamenti del diritto alla resistenza a partire da Hegel: tra seconda coercizione, diritto di necessità e vulnerabilità", in S. Achella, F. Iannelli, & C. Magni (Eds.), *Hegel between Subversion and Resistance, B@belonline* 9:51–65. http://doi. org/10.13134/2531-8624/1-2022/5

Breidbach O. 1982. *Das Organische in Hegels Denken. Studien Zur Naturphilosophie und Biologie um 1800.* Würzburg: Königshausen und Neumann.

- Corti L. & Schülein J.-G. (Eds.) 2023. *Life, Organisms, and Human Nature. New Perspectives on Classical German Philosophy.* Basel: Springer.
- Erle G. 2024. "Esiste un'attualità della Filosofia della natura di Hegel?", in G. Battistoni & F. Campana (Eds.), *Attraverso il sistema: criticità e guadagni teorici del pensiero hegeliano a 250 anni dalla nascita* (pp. 67–86). Napoli: Istituto Italiano per gli Studi Filosofici Press.
- Franzini Tibaldeo R. 2009. *La rivoluzione ontologica di Hans Jonas. Uno studio sulla genesi e il significato di 'Organismo e libertà'*. Milano-Udine: Mimesis.
- Gertz N. 2018. "Hegel, the Struggle for Recognition, and Robots," *Techné: Research in Philosophy and Technology* 22(2):138–157. https://doi.org/10.5840/ techne201832080
- Hegel G. W. F. 2012. Vorlesungen über die Philosophie der Natur I. Nachschriften zu den Kollegien der Jahre 1819/20, 1821/22 und 1823/24, in Id., Gesammelte Werke, ed. by the Rheinisch-Westfälische Akademie der Wissenschaften in Verbindung mit der Deutschen Forschungsgemeinschaft, Vol. 24.1. Hamburg: Felix Meiner.

Hegel G. W. F. 1992. Enzyklopädie der philosophischen Wissenschaften im Grundrisse (1830). Hrsg. von W. Bonsiepen & H.-C. Lucas, unter Mitarbeit von U. Rameil.
Hegel. Gesammelte Werke, Vol. 20. Hamburg: Felix Meiner.

Hegel G. W. F. 1991. *Elements of the Philosophy of Right*. Ed. by A. Wood, trans. by H. B. Nisbet. Cambridge: Cambridge University Press.

Hegel G. W. F. 1976. *Jenaer Systementwürfe III. Naturphilosophie*. Hrsg. von R.-P. Horstmann, unter Mitarbeit von J. H. Trede. *Gesammelte Werke*, Vol. 8 (pp. 3–184). Hamburg: Felix Meiner.

Hegel G. W. F. 1975. *Jenaer Systementwürfe I.* Hrsg. von K. Düsing & H. Kimmerle, in G. W.F. Hegel, *Gesammelte Werke*. Vol. 6 (pp. 1–265). Hamburg: Felix Meiner.

Hegel G. W. F. 1969. *Jenaer Realphilosophie: Vorlesungsmanuskripte zur Philosophie der Natur und des Geistes von 1805-1806*, hrsg. von J. Hoffmeister. Hamburg: Felix Meiner.

Honneth A. 1995. *The Struggle for Recognition*. Cambridge: The MIT Press. https:// mitpress.mit.edu/9780262581479/the-struggle-for-recognition/

Horstmann R.-P. & Petry M. J. (Eds.) 1986. *Hegels Philosophie der Natur: Beziehungen zwischen empirischer und spekulativer Naturerkenntnis* (pp. 121–137). Stuttgart: Klett Cotta.

Illetterati L. 1995. *Natura e ragione. Sullo sviluppo dell'idea di natura in Hegel*. Trento: Verifiche.

 Jonas H. 2015. Philosophie. Rückschau und Vorschau am Ende des Jahrhunderts. Vortrag im Prinzregententheater München 1993, in D. Böhler & B. Herrmann (Eds.), Das Prinzip Verantwortung. Erster Teilband: Grundlegung, in D. Böhler, M. Bongardt, et al. (Eds.), Kritische Gesamtausgabe der Werke von Hans Jonas, Philosophische Hauptwerke (pp. 561–575), Vol. I,2, Erster Teilband. Freiburg i. Br.: Rombach.

Jonas H. 2001. *The Phenomenon of Life. Toward a Philosophical Biology*. With a foreword by L. Vogel. Evanston (IL): Northwestern University Press.

Jonas H. 1985. *The Imperative of Responsibility. In Search of an Ethics for the Technological Age*. Trans. by H. Jonas with the Collaboration of D. Herr. Chicago and London: The University of Chicago Press.

McGilchrist I. 2019. *The Master and his Emissary: The Divided Brain and the Making of the Western World*, 2nd Edition. New Haven: Yale University Press.

Petry M. J. (Ed.) 1987. *Hegel und die Naturwissenschaften* (pp. 433–466). Stuttgart-Bad Cannstatt: frommann-holzboog.

Vieweg K. (Ed.) 1998. Hegels Jenaer Naturphilosophie. München: Fink.

Wandschneider D. 1982. *Raum, Zeit, Relativität. Grundbestimmungen der Physik in der Perspektive der Hegelschen Naturphilosophie.* Frankfurt am Main: Vittorio Klostermann.