

HEGEL'S PROTO-MODERNIST CONCEPTION OF PHILOSOPHY AS SCIENCE¹

A CONCEPÇÃO PROTOMODERNISTA DE HEGEL DA FILOSOFIA COMO CIÊNCIA

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Abstract: I argue that the reception of Hegel in the sub-field of history and philosophy of science has been in part impeded by a misunderstanding of his mature metaphilosophical views. I take Alan Richardson's influential account of the rise of scientific philosophy as an illustration of such misunderstanding, I argue that the mature Hegel's metaphilosophical views place him much closer to the philosophers who are commonly taken as paradigms of scientific philosophy than it is commonly thought. Hegel is commonly presented as someone who conceived of philosophy as a science that relied on the solitary genius of the individual thinker, and as a science whose propositions could not and should not be made accessible to "the common people". Against this view, I argue that Hegel in fact thought that philosophy was a thoroughly anti-individualistic activity, and that he emphasized the importance of the intersubjective accessibility of philosophical discourse. I argue that when we carefully reconstruct Hegel's reasons for his break with Schelling, and if we pay close attention to his explicit metaphilosophical pronouncements, we can see that he in fact adhered to what I call a "proto-modernist" conception of philosophy as a science. I conclude by pointing out how the mischaracterization of Hegel has served to obscure the existence of a strand of scientific philosophy that emerged by way of an immanent critique of Hegel, namely Marxist philosophy.

Keywords: Scientific Philosophy; Hegel; Marxist Philosophy; History of Philosophy of Science

Resumo: Afirmo que a recepção de Hegel no subcampo da história e da filosofia da ciência foi impedida, em parte, por um mal-entendido de suas visões metafilosóficas maduras. Levando em conta as posições influentes de Alan Richardson sobre a ascensão da filosofia científica como um exemplo de tal mal-entendido, eu argumento que as visões metafilosóficas do Hegel maduro o colocam muito mais perto dos filósofos que são comumente tomados como paradigmas da filosofia científica do que normalmente se pensa. Hegel é comumente apresentado como alguém que concebeu a filosofia como uma ciência que se apoiava no gênio solitário do pensador individual, e como uma ciência cujas proposições não podiam e não deveriam ser tornadas acessíveis "ao povo". Contra essa visão, argumento que Hegel, de fato, pensava que a filosofia era uma atividade totalmente anti-

¹I am indebted to Sandra Lapointe who taught me how to write about Hegel in a way that would not be too irritating to a historian of logic. I also received helpful feedback on an earlier version of this paper which was presented at the twelfth congress of HOPOS: The International Society for the History of Philosophy of Science, especially from Scott Edgar, Phillip Honenberger, and Sascha Freyberg. I am also grateful for Michelle Kosch's helpful comments on earlier drafts of this paper and for the helpful suggestions that were made by two anonymous referees for *Problemata*. I am also indebted to Rogelio Scott for his translation of the abstract into Portuguese.

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individualista, e que ele enfatizou a importância da acessibilidade intersubjetiva do discurso filosófico. Argumento que, quando reconstruímos cuidadosamente as razões de Hegel para sua ruptura com Schelling, e se prestarmos atenção aos seus pronunciamentos metafísicos explícitos, podemos ver que ele de fato aderiu ao que chamo de concepção "protomodernista" da filosofia como ciência. Concluo apontando como a descaracterização de Hegel serviu para obscurecer a existência de uma vertente da filosofia científica que surgiu por meio de uma crítica imanente de Hegel, a saber, a filosofia marxista.

Palavras-chave: Filosofia científica; Hegel; Filosofia marxista; História da filosofia da ciência

Introduction: A Place for Hegel in the History and Philosophy of Science?

Hegel continues to be depicted as a charlatan when it comes to science by prominent historians and philosophers of science such as Joseph Agassi, who refers to “the notorious *Naturphilosophie* that in the late eighteenth century and early nineteenth century Schelling, Fichte, and Hegel dished out” (Agassi 2008, 257), as well as to “the antiscientific *Naturphilosoph* Hegel” (Agassi 2008, 495). This distorted image of Hegel as the archetype of the anti-scientific philosopher, and as a peddler of mystical nonsense more generally, was disseminated by Agassi’s mentor, Karl Popper. However, I will not be dealing with Popper’s caricature of Hegel, since it has been debunked quite thoroughly by Walter Kaufman (1972). Moreover, I am not interested in arguing against the view that depicts Hegel as a peddler of nonsense per se, for this view has lost much of its appeal amongst many analytic philosophers. Instead, I am arguing against the view that Hegel was not a “scientific philosopher” in any recognizably modern or modernist sense. The view that Hegel was not a modernist scientific philosopher, and indeed that he was the anti-thesis of the modernist scientific philosopher, is still adhered to by prominent philosophers of science such as the Argentine philosopher of science Mario Bunge, who claims that Hegel “rejected the entire science of his time and attempted to pass off obscurity and even nonsense as depth” (Bunge 2012, 85).³ Even contemporary philosophers of science who are sympathetic to Hegel such as Alexander Bird misread Hegel on very significant points. For example, Bird in attempting to relate Hegel’s dynamic epistemology to Thomas Kuhn’s account of scientific revolutions uses the triad of “thesis, anti-thesis, and synthesis” in his exposition of Hegel (Bird 2008, 130; Bird 2015, 27), even though Hegel himself never employed the language of the triad of “thesis, anti-thesis, and synthesis” (Mueller 1958, 411; Plekhanov 1947, 99; Wood 1991, xxxii).

³ Matthias Neuber also endorses the view that Hegel was committed to a speculative metaphysics that has no place in a modernist approach to scientific philosophy (Neuber 2012, 51).

My approach in this paper is to attempt to locate Hegel's place in the history of scientific philosophy by way of an internal critique, which is itself an argumentative move associated with Hegel, of Alan Richardson's approach to the history of scientific philosophy.⁴ Richardson's approach to the history of scientific philosophy is significant for a variety of reasons. First, he lays out clear criteria by means of which we can determine if a given thinker can be considered as a scientific philosopher in the modern or modernist sense. Second, he makes clear distinctions between scientific philosophy, analytic philosophy, and logical empiricism. Hence, his framework allows one to argue that Hegel can be considered a proto-modernist philosopher without being taken to argue that Hegel is in fact a kind of logical empiricist.⁵ Third, his framework has been influential in recent work in the history of philosophy of science (Stump 2002, Coniglione 2007, Klein 2015, Heidelberger 2006, Neuber 2014).⁶ Hence, if one is able to show, by way of an internal critique of Richardson's account, that Hegel should be considered a proto-modernist scientific philosopher, then one would have been able to show that, within a framework that is acceptable to at least some philosophers who work on the history of philosophy of science, Hegel ought to have a place in the history of modernist scientific philosophy. Moreover, in his later work Richardson emphasizes that some influential historians of science and historically minded philosophers of science, such as E.A. Burtt, Cassirer, Lakatos, and Gerd Buchdahl were influenced by Hegelian approaches to the study of the history of science and philosophy (Richardson 2008, 89).⁷ I believe that if one can show that there are significant overlaps between the conception of philosophy as science that was endorsed by the mature Hegel and what Richardson calls the modernist conception of

⁴ By 'internal critique' I mean a critique that adopts, for the sake of argument, the criteria that are adhered to by the proponent of the standpoint that is the object of one's critique (Hegel 1969, 580).

⁵ To argue that Hegel is a kind of logical empiricist would essentially function as a *reductio ad absurdum* of one's argument.

⁶ David J. Stump takes issue with Richardson's framework for the history of scientific philosophy by arguing that "there is a danger in portraying scientific philosophy broadly enough to include Hegel, since it could disrupt any links that can be found between scientific philosophy and the logical positivists" (Stump 2002, 148). The first point to note is that Stump seems to be misreading Richardson. For Richardson, as we will see below, is arguing that while Hegel thought that philosophy must become a science, he did not endorse what Richardson calls a modern (or modernist) conception of science (the conception of science which was endorsed by the logical positivists). The second point is that it is unclear why Stump thinks that thinking of Hegel as a modernist scientific philosopher (or a proto-modernist scientific philosopher) leads to the attenuation of any links between scientific philosophy and logical positivism. We can think of logical positivism as a sub-category of scientific philosophy. There is no reason why we have to endorse the view that for the category of scientific philosophy to be useful for taxonomical purposes it must have the same extension as the category of logical positivism. Perhaps being a logical positivist is a sufficient condition for being a scientific philosopher, but it is not a necessary one.

⁷ Richardson has also criticized Michael Friedman's "de-Hegelianized" reading of Cassirer (Richardson 2010). I agree with Richardson on this point. Cassirer's approach to the historiography of philosophy and science is clearly Hegelian (EL Nabolsy 2019).

philosophy as science, then we can make sense of how the historians of science and historically minded philosophers of science mentioned above could have endorsed certain Hegelian theses about the historiography of science and philosophy.

I argue that Alan Richardson's characterization of Hegel as the archetype of pre-modernist philosophy in his 1997 paper "Toward a History of Scientific Philosophy" is based on a misunderstanding of the mature Hegel's metaphilosophical views.⁸ I argue that Hegel's conception of philosophy as a science is in fact much closer to the metaphilosophical views that were held by the philosophers who Richardson identifies as paradigms of modernist scientific philosophy. What Richardson calls scientific philosophy refers to a set of methodological and metaphilosophical theses that were held by philosophers active from the 1860s to the 1930s who diverged widely in terms of their attitudes towards substantial or first-order philosophical questions. The list of scientific philosophers includes: Bertrand Russell, Edmund Husserl, the members of the Vienna Circle, Richard Avenarius, Alois Riehl, among others. In a negative sense what united this disparate set of thinkers was their rejection of Hegelian philosophy, specifically what they saw as its individualistic conception of philosophy. According to Richardson all those thinkers rejected Hegelian philosophy in so far as it represented to them "a grand synoptic view of the world founded, built, and polished by *one thinker in splendid isolation* [my emphasis]" (Richardson 1997, 427). The critique of Hegel from the standpoint of a modernist scientific philosophy is based on three charges. The first charge is that Hegel conceived of philosophy as the product of an isolated, solitary individual genius. The second charge is that Hegel thought that philosophy cannot be and should not be in principle accessible to all, i.e., that he held an elitist conception of philosophical discourse as essentially an esoteric discourse. The third charge, which is implicit in Richardson's characterization of Hegel, is that Hegel simply did not take the empirical sciences seriously enough to qualify as a scientific philosopher in the modernist sense. In the sections below, I draw on the relevant textual evidence in order to undermine these three charges. I also argue that in order to understand the origins of the first and second charges, we should bring into view the doctrine of intellectual intuition, which was adhered to by Schelling and the young Hegel. I argue that there are in fact systematic reasons for adopting an elitist and individualist conception of philosophical activity and philosophical discourse if one adheres to the doctrine of intellectual intuition. However, I argue that there is strong textual evidence to support the view that Hegel had abandoned the

⁸ While Richardson discusses Hegel in only about three pages, his characterization of Hegel is essential for his argument, since Hegel serves for him as the archetype of the pre-modernist scientific philosopher.

doctrine of intellectual intuition *precisely because* of its individualistic and elitist consequences. My aim is not to argue that Hegel's metaphilosophical views overlapped completely with the metaphilosophical views that were held by the philosophers who Richardson points to as paradigms of modernist scientific philosophy. My aim is rather to show that there are significant overlaps between the two metaphilosophical views, such that it would be inaccurate to think of Hegel as *the archetype* of the pre-modernist philosopher.

Hegel's Anti-Individualistic Conception of Philosophy

In this section I argue that Hegel's impersonal, anti-individualistic conception of philosophy as a science places him close to what Alan Richardson has referred to as the "modernist sensibility" which he takes as the characterizing feature of the movement towards scientific philosophy. The latter, according to him, played an important role in the genesis of what we today call analytic philosophy. Richardson notes that some of the criticisms that were directed by key figures in this movement (he refers specifically to Russell and Husserl) towards Hegel, to the effect that a philosophy which is not scientific is not proper philosophy at all, miss their target: "Hegel would find himself in agreement with the scientific philosophers that if philosophy was to be anything, it must be a science" (Richardson 1997, 434). Hegel frequently refers to philosophy as a science [*Wissenschaft*] (Hegel 1995c, 165).⁹ He clearly thought that when narrating the history of philosophy, one narrates the history of the development of a science: "the succession of philosophic systems is not due to chance but represents the necessary succession of stages in the development of this science [*Wissenschaft*]" (Hegel 1995c, 552). Hegel, like Husserl and like Russell, thought that philosophy was "the objective science of truth" (Hegel 1995a, 12).

However, according to Richardson, the key characteristic which distinguishes the adherents of scientific philosophy from allegedly pre-modernist or anti-modernist systematic philosophers like Hegel is their modernist conception of science, or to use his expression, their "modernist sensibility". According to Richardson, "the scientific philosophers saw science [and

⁹ Note that one cannot simply assume without argument that the word '*Wissenschaft*' had the same meaning for Hegel that it had for the modernist scientific philosophers. In fact, Richardson's argument is precisely that it did not have the same meaning. He attempts to do this by showing that Hegel's conception of *Wissenschaft* had connotations of elitism and individualism that were simply alien to the conception of *Wissenschaft* that was endorsed by the modernist scientific philosophers. As I will show in this article, to the extent that the mature Hegel held that *Wissenschaft* requires intersubjective clarity and accessibility, as well as an anti-individualistic conception of intellectual work, the meaning of the word '*Wissenschaft*' for him overlapped significantly with the meaning of the word '*Wissenschaft*' as employed by the modernist scientific philosophers.

consequently philosophy, in so far as it must become a science] as an intrinsically collaborative project, built by workers relying on the methods and results of their fellows, striving to produce clear, intersubjectively understood and accepted results” (Richardson 1997, 434). One important corollary of this view is that philosophy, in so far as it as a science, cannot be just an expression of the individuality of an inspired genius. As Richardson puts it, “within this modernist sensibility, that which is an expression of individual genius is considered hopelessly subjective and, consequently, the antithesis of scientific knowledge” (Richardson 1997, 435).¹⁰ Richardson sees this modernist characterization of science as the crucial difference between Hegel’s conception of philosophy and that of the scientific philosophers, taking Russell, Husserl, and the members of Vienna Circle as paradigmatic examples.

Nonetheless, the mature Hegel actually held a modernist, or at the very least a proto-modernist, conception of science, especially in his rejection of the idea that philosophy qua science is the expression of individual idiosyncratic genius. This modernist, anti-individualistic conception of science is reflected in his methodological approach to the history of philosophy. One of the first things that he says in his introductions to his *Lectures on the History of Philosophy* is that because philosophy is a science, he will not be focusing on individual philosophers qua individuals but rather on their contributions to the store of objective knowledge: “the events and actions of this history [i.e., the history of philosophy] are therefore of such a kind that personality and individual character do not enter to any large degree into its content and matter” [*Die Begebenheiten und Handlungen dieser Geschichte sind deswegen zugleich von der Art, dass in deren Inhalt und Gehalt nicht sowohl die Persönlichkeit und der individuelle Characktere eingeht*](Hegel 1995a, 1/Hegel 1971a, 20). Hegel is very critical of the manner in which individualistic originality was overvalued by his Romantic contemporaries. He thought that if our primary commitment is to originality rather than objective truth, then what we will end up with is exhibitionist one-upmanship: “they outbid one another in conceits of fancy, in ardent poetry [...] the glory of philosophy is departed, for it presupposes a common ground of thoughts and principles—which is what science demands— or at least of opinions [...] it [this desire to make philosophy an expression of originality and individuality] results in each bringing forth something more preposterous than another” (Hegel 1995c, 509-510).

Hegel’s anti-individualistic conception of philosophy is very clear in his account of the history of philosophy. Hegel frequently emphasizes that he is not interested in talking about the

¹⁰ This point about anti-individualism as a key characteristic of modernist scientific philosophy is also emphasized by Richardson in more recent work (Richardson 2008, 91; Richardson 2012).

“originality” or “genius” of the thinkers that he deals with qua historian of philosophy. Instead he prefers to deal with them as representing various, successive stages in the process of the development and unfolding of human rationality. In his historical account each thinker represents a “passing moment” in the developing totality that is human rationality and its actualization in social institutions towards the end of freedom (Hegel 1995a, 34). In fact, Hegel applies the same approach to his own work. It is slightly misleading to speak, from Hegel’s point of view, of the final and complete philosophical system as Hegel’s own system. Hegel himself never spoke of it as “his” system precisely because he had a very anti-individualistic conception of philosophy and of intellectual and cultural production in general.

In his account of the history of philosophy, Hegel is always at pains to emphasize that, in the final analysis; philosophical advances are public cultural achievements rather than expressions of individual idiosyncrasies. Hence, he describes philosophical advances as “the deeds of the World-Spirit”, i.e., of humanity in general (Hegel 1995b, 453/Hegel 1971b, 489). Allen Wood puts this point well:

He is as far as possible in this regard from his Romantic contemporaries who thought of both philosophy and art as products of individual genius, monuments to the idiosyncrasy of their self-celebrating creators. For Hegel, a sound philosophical system is not anyone’s personal creation at all. In his view, the content of his system is merely the Western philosophical traditions, appropriated by the reflective spirit of modernity (Wood 1990, 7).

For Hegel, philosophy is one manifestation of the “Spirit” [*Geist*] of a given people. Hegel notes that *Geist* is not some mysterious substance that exists over and above human beings, but rather “it is human consciousness” [*menschliches Bewußtsein*] (Hegel 1975, 95).¹¹ In the *Phenomenology of Spirit*, Hegel speaks of “Spirit” as “the unity of the different independent self-consciousnesses which, in their opposition, enjoy perfect freedom and independence: ‘I’ that is ‘We’ and ‘We’ and that is ‘I’” (Hegel 1977, 177). As Hegel sees it, Spirit manifests itself not only in philosophy but also in human “institutions and forms of governments, their morality, their social life and capabilities, customs and enjoyments of the same” (Hegel 1995a, 53). Hegel believed that any particular philosophical discourse is a reflection of the cultural context within which it takes place. Hence, while it may be true that philosophy is done by individual thinkers, it is fundamentally an expression of a wider cultural and social context. Hegel writes that:

¹¹ For more on this reading of ‘*Geist*’, see (Houlgate 1990).

the particular form of a philosophy is thus contemporaneous with a particular constitution of the people amongst whom it makes its appearance, with their institutions and forms of government, their morality, their social life and the capabilities, customs and enjoyments of the same; it is so with their attempts and achievements in art and science [...] Philosophy is one form of these many aspects (Hegel 1995a, 53).¹²

Hegel's point is that the sort of problems that are raised within a particular philosophical discourse are conditioned by the cultural and social context within which that philosophical discourse takes place. I understand him to mean that philosophy gets its problems by reflecting on the presuppositions and assumptions of cultural activities such as moral judgments, politics, the scientific discourse of a certain period, etc. In fact, as James Lawler and Vladimir Shtinov point out, the *Geist* "which historical philosophies express, is not the particular community of philosophers, but the broader community of society as a whole, an economic, social, political, and cultural totality" (Lawler and Shtinov 1988, 276). Hegel, as should be clear by now, would have agreed with Husserl, who is cited by Richardson as a paradigmatic example of the modernist reaction against the alleged subjectivity of systematic philosophy as carried out by thinkers like Hegel, when the latter says that "science [...] is impersonal. Its collaborator requires not wisdom but theoretical talent. What he contributes increases a treasure of eternal validities that must prove a blessing to humanity" (Husserl 1965, 149. Quoted in Richardson 1997, 432).

Hegel observes that in the modern world "only a common mode of existence is possible in any calling or condition [i.e., including philosophy], and to this Spinoza [in his relative solitude] forms the solitary exception [Es ist nur eine gemeinschaftliche Weise der Existenz in einem Stande möglich ; *Spinoza macht Ausnahme*]" (Hegel 1995c, 169/ Hegel 1971c, 72-73).¹³ Hegel's anti-individualistic approach to the study of the history of philosophy was the object of criticism by historians of philosophy who thought that the history of philosophy can be accurately understood only if it is described as the history of individual geniuses. For

¹² In relation to this point, we should note that in their *Wissenschaftliche Weltauffassung*, the philosophers of the Vienna Circle also present their orientation to philosophy as the expression of a wider social and cultural development: "we witness the spirit of the scientific world-conception penetrating in growing measure the forms of personal and public life in education, upbringing, architecture, and the shaping of economic and social life according to rational principles" (Neurath, Carnap, Hahn 1973, 317-318). In fact, one can say that there is a relation of descent with modification between Hegel's conception of the relationship between philosophy and its socio-historical context, and Neurath's view, influenced by his understanding of the fundamental theses of historical materialism, that philosophy is part of the superstructure of society. For an account of Neurath's understanding of philosophy as part of the superstructure of a given society, see (Uebel 2005; 2010).

¹³ Nevertheless, Hegel's account of Spinoza as a philosopher who lived in complete solitude is in fact false (Nadler 1999, 194).

example, the French philosopher and historian of philosophy Charles Renouvier (1815-1903) took issue with Hegel's neglect of the individuality of the philosophers whose views he was expounding and interpreting qua historian of philosophy (Smart 1962, 32-34). At any rate, it is strange that Richardson accuses Hegel of all people of thinking of philosophy in individualistic terms as the expression of a solitary genius. If anything, one can understand some of the anti-Hegelian reactions in later nineteenth century European philosophy as reactions against Hegel's anti-individualism. According to those critics, Hegel submerged the individual, and individual things more generally, in one undifferentiated substance in the course of adopting a form of monism (as understood or misunderstood by his critics). For example, one of Hermann Lotze's primary criticisms of Hegel was that he "did not attribute enough reality to individual things" (Beiser 2014, 68). Leopold von Ranke also criticized Hegel's neglect of the individual in his historical writings (Beiser 2014, 139)

The Medium of Philosophy: Intersubjective Accessibility and Clarity

But what about the public, intersubjective accessibility of philosophical knowledge, i.e., its intersubjective character and its clarity? Did Hegel believe that philosophy is, in principle, accessible to all, or even that it should be accessible to all? Richardson answers this question in the negative, and he lends support to his claim by citing this passage from Hegel's early writings: "Philosophy by its very nature is esoteric; for it is neither made for the masses nor is it susceptible of being cooked up for them. It is philosophy only because it goes contrary to the understanding and thus even more so 'to sound commonsense,' the so-called healthy human understanding, which actually means the local and temporary vision of some limited generation of human beings" (quoted in Richardson 1997, 437). This seemingly incriminating passage is taken from the essay entitled "On the Essence of Philosophical Criticism Generally, and its Relationship to the Present State of Philosophy", which was published in 1802 as an introduction to the *Kritisches Journal der Philosophie* edited by F. W. J. Schelling.

In fact, it is known that this essay was the product of collaboration between Schelling and Hegel. Here is H.S. Harris' reconstruction of how this essay came to be: "The two editors [Hegel and Schelling] discussed what should be said (and discussed it at some length) before Hegel sat down and wrote a draft for Schelling's review and approval. Schelling, as senior editor, certainly went over that draft carefully and made revisions and additions, because he felt directly responsible for what was said [...] Hence he [Schelling] should certainly be regarded

as a co-author of the piece” (Hegel and Schelling 2000, 274). Now if this passage is taken from an essay that was co-written with Schelling, then we can work from what we know about Schelling’s and Hegel’s respective concerns during this period in order to make an informed conjecture about whether it is likely that Hegel himself wrote the passage in question. In fact, it seems that during this period Hegel, even when he was under the influence of Schelling, did not think that philosophy should be esoteric. As Harris notes in a comment on this specific passage: “the insistence that philosophy is essentially esoteric belongs to Schelling more than to Hegel [...] [he] Hegel insists that the *Volk* can “rise to philosophy”[...] this contradicts Schelling’s more rigorously aristocratic view that philosophy is *fürsich* antipathetic to the vulgar” (Hegel 2000, 289). Georg Lukács also makes the same point in his study of Hegel’s development: “anyone who has followed Hegel’s development in Jena will be aware that Hegel’s views were diametrically opposed to those expressed here [i.e., Schelling’s view that philosophy is the product of inspired genius that is not in principle accessible to ordinary people because at least some of its insights cannot be articulated in discursive form]” (Lukács 1975, 426). Hence, it is not even clear that this passage expresses Hegel’s own point of view, even during the time of the Jena writings. In addition, the esoteric approach to philosophy, as it was taken up by Schelling, is associated with the doctrine of intellectual intuition and, in fact, it is a consequence of it. According to this doctrine, rational discursive thought cannot grasp totalities (or wholes). Hence, totalities, and the totality that really matters here is the unconditioned, can only be grasped if we postulate “a purely immediate, or non-discursive grasp of the absolute”, i.e., immediate intellectual intuition (Beiser 2005, 157). If this is true, then at least some of the content of philosophy as a science cannot be articulated in discursive form, and it would not be accessible to someone who lacks the capacity for intellectual intuition.

Nonetheless, it is also well known that by 1804 Hegel had abandoned the doctrine of intellectual intuition and had broken away from Schelling, precisely because he thought that it was dogmatic in character in so far as its adherents could not provide a discursive justification in clear language of their philosophical standpoint (Beiser 2005, 157). This is what Hegel himself says in the preface to the *Phenomenology of Spirit*. He refers to Schelling’s intellectual intuition as “the rapturous enthusiasm, which like a shot from a pistol, begins straight away with absolute knowledge, and makes short work of other standpoints by declaring that it takes no notice of them” (Hegel 1977, 16). The same criticism is repeated with greater clarity in this passage from his discussion of Schelling in his account of the history of philosophy: “in subjective thought, rational, speculative thought is thus indeed demanded, but if this appears

false to you nothing further can be said to you [by those who adhere to the doctrine of intellectual intuition] than that you do not possess intellectual intuition. The proving of anything, the making it comprehensible, is thus abandoned; a correct apprehension of it is directly demanded” (Hegel 1995c, 525). In other words, the adherents of the doctrine of intellectual intuition cannot expound their standpoint to those who do not hold it because it is not amenable to articulation in discursive form. Hence, they can only dogmatically assert the truth of their claims against their rivals. This is something that Hegel found unacceptable. The mature Hegel also makes his rejection of the elitist implications of the doctrine of intellectual intuition very clear in the following passage: “this [i.e., intellectual intuition] gave the philosophy of Schelling the appearance of indicating that the presence of this intuition demanded a special talent, genius, or condition of mind of their own, or as though it were generally speaking an accidental faculty which pertained to the specially favoured few [...] Philosophy, however, is in its own nature capable of being universal [i.e., not only making claims that are advanced as universally valid, but also claims that are in principle accessible to everyone]; for its ground-work is thought, and it is through thought that man is man [i.e., the kind of thinking that is required in philosophy is not the exclusive prerogative of solitary geniuses]” (Hegel 1995c, 520).

Hegel himself thought that his primary task was to make philosophy *teachable* and this, in his view, required him to de-emphasize the role of individuality and to emphasize the discursive nature of philosophical knowledge both in terms of its acquisition or discovery and in terms of its presentation. In a letter to Isaac von Sinclair in 1810, Hegel emphasizes this point: “I am a schoolmaster who has to teach philosophy, and perhaps this is why I also hold that philosophy must assume a regular structure as teachable as geometry” (Hegel 1984, 288). Compare this emphasis on reducing philosophy to a regular structure as teachable as geometry to Riehl’s emphasis on mathematics as a model for philosophy, which he thought of as a science of the special sciences, referring to this science of sciences as ‘logic’: “The form of science is itself the object of a science, logic, which is one and the same no matter how different the objects of knowledge are in their character. [...] Logic is an objective science just as is mathematics, which is closely related to it” (quoted from Richardson 1997, 430).

Hegel in fact agrees with Riehl that philosophy would have to be as objective as mathematics. Objectivity in this context refers to what Lorraine Daston has described as *aperspectival objectivity*, which according to her was absent in eighteenth century scientific discourse: “aperspectival objectivity was the ethos of the interchangeable and therefore

featureless observer [...] subjectivity became synonymous with the individual and solitude; objectivity, with the collective and conviviality” (Daston 1992, 609). According to Richardson, this notion of objectivity only gained prominence in philosophy with the rise of scientific philosophy in the mid-nineteenth century. However, this notion of aperspectival objectivity is clearly already present in Hegel’s conception of philosophy qua science. By now it should be clear that Richardson’s characterization of Hegel as someone who thought that the contents of scientific philosophy are *in principle* “knowable only to the rare intellect” is entirely mistaken and that it stems from a conflation between Hegel’s position and Schelling’s position (Richardson 1997, 437).

If the Vienna Circle’s “emphasis on what can be grasped intersubjectively” is one of the distinguishing marks of the modernist conception of philosophy as science, as Richardson takes it to be, then Hegel’s conception of philosophy is not so distant from what Richardson identifies as the modernist conception of philosophy (Neurath, Carnap, Hahn 1973, 306). The emphasis on intersubjectively accessible conceptual language in philosophy which is stressed by the members of the Vienna Circle and which is expressed in their rejection of immediate intuition as a legitimate source of epistemic justification is very close to the criticisms that Hegel levelled at the doctrine of intellectual intuition: “The view which attributes to intuition a superior and more penetrating power of knowing, capable of leading beyond the contents of sense experience and not to be confined by the shackles of conceptual thought – this view is rejected” (Neurath, Carnap, Hahn 1973, 309). We can see that Richardson exaggerates the novelty of the metaphilosophical views that motivated scientific philosophy, and he does this because his presentation of Hegel as a “pre-modernist” philosopher is very much off the mark.

Hegel’s emphasis on the necessity of communicating philosophy in a discursive manner that would make it intersubjectively accessible is evident in the way in which he emphasizes clarity, although admittedly he fails in meeting this goal himself. In this respect Hegel is in full agreement with Neurath and the rest of the Vienna circle when they announce that in philosophy “neatness and clarity are striven for, and dark distances and unfathomable depths rejected” (Neurath, Carnap, Hahn 1973, 305-306). Hegel is fully on board with the idea that “dark distances and unfathomable depths” have no place in philosophical discourse. As Hegel points out: “the less clear the thoughts, the deeper they appear; what is most essential, but most difficult, the expression of oneself in definite conceptions, is omitted” (Hegel 1995a, 195). Hegel also claims that clarity is the essence of thought, i.e., that for thought to be thought in the fullest sense it must be clearly expressed: “thought is, on the contrary, simply its manifestation;

clearness is its nature and itself" (Hegel 1995a, 89). One may think that Hegel's insistence on clarity in expression is rather ironic given the notorious obscurity of his writings. However, it would not follow from this fact that Hegel did not value clarity, it would only follow that he failed when measured against his own standards.

One can raise the objection that the fact that most readers have found Hegel's work so difficult to understand implies that despite of all that he says about clarity and teachability, he did not in fact seriously believe that philosophy should be in principle accessible to all. I think that the most appropriate response is to say that one should make a distinction between the Hegelian modernist conception of philosophy as a science and Hegel's own personal failings to live up to the standards that he had set for himself. The distinction here is between a set of metaphilosophical commitments and what they logically entail on the one hand, and Hegel's actual practices as a philosopher on the other hand, which can and did obviously depart from what is logically entailed by his metaphilosophical views. Moreover, I think we should take seriously Hegel's own metaphilosophical pronouncements, since there is no reason to suppose that he did not believe what he said even if he failed to implement it. For if he did not believe that philosophy should be written in an accessible way, then there is no explanation for his justification of his break with Schelling, i.e., his explicit critique of Schelling's esoteric approach to philosophy and its elitist implications. The key point is that it is possible to criticize Hegel's prose for its lack of clarity *from a Hegelian standpoint*.

Did Hegel Take the Empirical Sciences Seriously?

Another factor which leads to Richardson's characterization of Hegel as the paradigmatic pre-modernist philosopher is Richardson's implicit adoption of the view that Hegel essentially could not care less about the empirical sciences and that he constructed his philosophical system independently of the results that were obtained by the natural sciences (Richardson 1997, 427). If this was true, then this would be a very significant difference between Hegel's conception of philosophy as a science, and the conception of philosophy that was advanced by Avenarius, Russell, Husserl, Neurath, and Carnap. I have deliberately preferred to speak of "taking the empirical sciences seriously" because scientific philosophers differed among themselves as to what is the exact nature of the relationship between philosophy and the natural sciences. For example, Avenarius thought that philosophy should only deal with an empirically given subject matter if it is to become scientific and if it is to make any kind of

progress (Richardson 1997, 428). According to Avenarius this subject matter is comprised by the empirically given scientific disciplines, and philosophy was understood to be a general science of the sciences. Husserl, on the other hand, thought that the subject matter of scientific philosophy, which in his case is identical with phenomenology, would be pure consciousness, as opposed to empirical consciousness which is the object of psychology (Richardson 1997, 433). However, what unifies the group of philosophers who are labeled as scientific philosophers by Richardson is their belief that, at a minimum, philosophy cannot simply proceed by ignoring the results that have been obtained by the empirical sciences. The distinction between them and Hegel would be the distinction between philosophers who take the results of the empirical sciences seriously and the speculative, not in the Hegelian sense but in the common pejorative sense, philosopher who ignores the empirical sciences.

Hegel is commonly perceived as a speculative philosopher who ignored the natural sciences. But this reputation is ill deserved. Not only did Hegel hold that the empirical natural sciences are extremely important for philosophy, he was also very well versed in the natural sciences of his time (Westphal 2008, 284; Zuckert 2017, 271; Burbidge 2006, 177; Wandschneider 2013, 105; von Engelhardt 1993; Pinkard 2005; Posch 2011). In fact, during his so called “Jena period”, Hegel was actively involved in scientific research himself: he did research in botany, chemistry, optics, medicine, and geology (Ferrini 2009, 94). Hegel was deeply committed to ensuring that the contents of philosophy do not contradict the results obtained through empirical sciences. In the philosophy of nature section of the *Encyclopaedia* he writes: “it is not only that philosophy must accord with the experience nature gives rise to; in its formation and in its development, philosophic science presupposes and is conditioned by empirical physics” (Hegel 1970, 197). For Hegel, the natural sciences served as a touchstone for the truth of philosophy (Buchdahl 1993, 69). Moreover, it is a mistake to believe that Hegel thought that his *Naturphilosophie* was the result of an *a priori* approach to the study of nature.¹⁴ As Beiser points out, Hegel “never accepted any fundamental distinction in kind between philosophy and empirical methods” (Beiser 2005, 108). In fact, dialectic is nothing other than the bracketing of all presuppositions and the examination of the given subject matter according to its own internal structure (Hegel 1976, 66). His philosophy of nature does not therefore consist in the application of *a priori* principles to nature. Hegel himself says that dialectic “is the immanent contemplation of the object; it is taken for itself, without previous

¹⁴ Although this view still seems to be prevalent amongst some historians of the philosophy of science, e.g., (Edgar 2015, 120).

hypothesis, idea or obligation, not under any outward conditions, laws or causes; we have to put ourselves right into the thing, to consider the object in itself, and to take it in the determinations which it has" (Hegel 1995a, 265). Consequently, in so far as Hegel takes a dialectical approach to *Naturphilosophie*, he attempts to bracket all presuppositions. Dialectic is not a method that is applied *a priori* to a given subject matter. This is made clear in his criticism of the Schellingians who have brought *Naturphilosophie* into disrepute by imposing an *a priori* structure on natural phenomena: "this externally applied science takes the place of dialectic progress; and this is the special reason why the philosophy of nature has brought itself into discredit, that it has proceeded on an altogether external plan, has made its foundation a ready-made scheme, and fitted into it nature as we perceive it" (Hegel 1995c, 542).

Hegel not only thinks that philosophy is conditioned by the empirical sciences, he also thinks that the progress of philosophy depends on the progress of the natural sciences: "without the working out of the empirical sciences on their own account, philosophy could not have reached further than with the ancients" [*ohne die Ausbildung der Erfahrungswissenschaften für sich hätte die Philosophie nicht weiter kommen können als bei den Alten*] (Hegel 1995c, 176/ Hegel 1971c, 79). Hegel is in part ascribing the superiority of modern philosophy over ancient Greek philosophy to the superiority of modern science over the empirical sciences of the ancient Greeks. This is a very strange thing to do for someone who supposedly thinks that philosophy is completely independent of the empirical sciences and who supposedly ascribes the superiority of his own philosophical system to his individual genius.

I do not wish to argue for the claim that that the metaphilosophical views which motivated Hegel were the same as Russell's or Neurath's. Nor do I wish to claim that there was nothing novel about what Richardson identifies as the "modernist" conception of philosophy. I do, however, wish to point out that several of the metaphilosophical views that Richardson associates with the modernist conception of philosophy are found in Hegel. Moreover, in order to identify the aspects which are novel to, e.g., the philosophers who belonged to the Vienna Circle, one has to engage in a detailed analysis of the metaphilosophical views that informed the work of both "modernist" and "non-modernist" philosophers. Though, as we have seen, it might be more accurate to describe Hegel as a "proto-modernist" philosopher. In fact, I think that the main feature which is not very explicit in Hegel, but which is very explicit amongst those who Richardson identifies as modernist philosophers, is the emphasis on collaborative work. As Richardson puts it: "one of the chief themes of the call to a scientific philosophy was the intrinsically social character of science –science was conceptualized as a collaborative

discipline in which each coworker provided a small bit of the whole by relying on the similarly piecemeal results of his fellows. Solitary geniuses need not apply [...]” (Richardson 1997, 438). As we have seen, Hegel would certainly agree with the scientific philosophers that “solitary geniuses need not apply”, and we do know that Hegel engaged in collaborative work both directly with Schelling, and indirectly by drawing on the insights of political economists, natural philosophers (scientists), philosophers, historians, poets, mathematicians, playwrights, etc. This is a weaker conception of collaborative work than the one that was held by the members of the Vienna Circle, at least in relation to their program of an *International Encyclopedia of Unified Science*. In his 1938 article, “Unified Science as Encyclopedic Integration”, Neurath claims that the *Encyclopedia* was modelled on the *Encyclopédie* of Diderot and D’Alembert in so far as the latter was “achieved by the co-operation of a great many specialists” (Neurath 1962, 2). Hegel’s *Encyclopedia* on the other hand was not the product of co-operation between specialists. To this extent it is important to recognize that Hegel’s conception of collaboration is not as strong as the conception of collaboration that was endorsed by the members of the Vienna Circle.

However, it is important to note that not all of the philosophers who are taken to be modernist scientific philosophers by Richardson and others had such a strong conception of collaboration. Husserl would be a good example of a scientific philosopher who did not emphasize collaboration as much as the members of the Vienna Circle.¹⁵ In fact, we may think of the collaboration requirement in terms of degrees of commitment, with Hegel and Husserl occupying the middle and the Vienna Circle standing at one extreme end of the spectrum. After all, being a Vienna Circle philosopher is not the only way of being a modernist scientific philosopher. The fact that Hegel employs a weaker conception of collaboration than the one endorsed by the members of the Vienna Circle accords with my thesis. Namely that Hegel’s professed metaphilosophical views amount to a proto-modernist view of philosophy as a science. Hegel does not represent modernist scientific philosophy in its fully mature form, but neither can one consider him to be the archetype of the conception of philosophy which the scientific philosophers rebelled against.

Hegel recognizes that some degree of specialization is necessary in order to accomplish anything at all: “the share in the total work of Spirit [*Geist*] which falls to the individual can only be very small [Hegel is talking about progress in general, which includes political, cultural,

¹⁵This point and the point regarding the *International Encyclopedia of Unified Science* were helpfully brought to my attention by Scott Edgar.

economic, and scientific progress]. Because of this the individual must all the more forget himself, as the nature of science implies and requires. Of course, he must make of himself and achieve what he can; but less must be demanded of him, just as he in turn can expect less of himself, and may demand less for himself” (Hegel 1977, 45). Hegel is not at all opposed to the idea that in order to achieve results in science, and therefore in philosophy as well, it is necessary to specialize to a certain degree and rely on the results of others. I would argue, against Richardson and historians of “modernist scientific philosophy” that have been influenced by him, that Hegel is better viewed as a “proto-modernist” philosopher rather than as a pre- or anti-modernist philosopher. Thus, Hegel does have a place in the history and philosophy of science, as a “proto-modernist” scientific philosopher.

The Consequences of Understanding Hegel as a Proto-Modernist Philosopher for Recognizing Non-Western Marxism as a Strand of Scientific Philosophy

Richardson’s inaccurate account of the relationship between Hegel’s conception of philosophy as a science and the conception of philosophy held by those described by Richardson as modernist scientific philosophers, leads him to neglect an important and influential strand of scientific philosophy which has its origins, to some extent, in Hegel’s thought, namely Marxist philosophy.

If one thinks that Hegel’s philosophy is a paradigm of pre-modernist philosophy, then it would be reasonable to infer that ways of doing philosophy that emerged from an immanent critique of Hegelian philosophy, and not as a complete unqualified rejection of it, are also pre-modernist and unscientific.¹⁶ It is important to note that the philosophers who are today associated with Marxist philosophy amongst many Anglophone academics (and many non-Anglophone academics as well), e.g., Adorno, Horkheimer, Marcuse, etc. only represent what came to be called “Western Marxism”, and they do not in any way represent the full spectrum of Marxist philosophy in the twentieth century. Hence, while it is true that so-called “Western Marxism” did not aspire towards scientific philosophy in the modernist sense, and in many ways its leading thinkers represented themselves as critics of scientific philosophy, we should not forget that Marxist philosophy done in the “Western Marxist” vein represents only a single

¹⁶ Richardson in fact only mentions Marxism once in passing in one of his more recent articles when discussing strands of scientific philosophy in the late nineteenth century (Richardson 2002, 621-623).

strand of Marxist philosophy.¹⁷

Richardson's error of omission is very strange once we recognize that many Marxists from Frederick Engels through to A. V. Lunacharsky and later Soviet philosophers such as T.I. Oizerman and A.S. Bogomolov clearly held a modernist conception of philosophy as a science. Engels thought that Hegel showed that "the task of philosophy thus stated [i.e., in the pre-modernist conception of philosophy] means nothing but the task that a single philosopher should accomplish that which can only be accomplished by the entire human race in its progressive development –as soon as we realize that, there is an end of all philosophy in the hitherto accepted sense of the word" (Engels 1941, 15). He adds that "in the long run no one has helped us to realize it [that philosophy in the traditional sense is over] more than Hegel himself" (Engels 1941, 15). Compare this to what Richardson says about the ambitions of scientific philosophers in the second half of the nineteenth century and the early twentieth century: "according to their own self-conception, scientific philosophers [...] were not attempting one last shot at a traditional project of foundational empiricism or 'even first philosophy'. They were, rather, reorienting the notion of philosophy itself based on a new conception of any legitimate knowledge-producing enterprise" (Richardson 1997, 437). Engels is a particularly good example insofar as he shared the view that philosophy, following the model of the sciences, should take collaborative form while not explicitly distancing himself from Hegel.¹⁸ This suggests that he was able to identify the proto-modernist strands in Hegel's conception of philosophy as science, and that he was able to make a distinction between the Hegelian conception of philosophy as science in a modernist sense and Hegel's own failures to live up to this standard. Note that this is quite different from claiming that Marx and Engels' conception of philosophy as a science was identical to Hegel's. I am simply pointing out that it was possible for them to develop their conception of science by way of an internal critique of Hegel as opposed to a wholesale rejection of Hegel, which they would have had to do if Hegel

¹⁷ Moreover, the fact that the strand of Marxist philosophy which attempted to place some distance between philosophy and the sciences has come to be identified with Hegelianism, i.e., with the label "Neo-Hegelian Marxism" (Sheehan 2017, 6) has led to some confusion about the relationship between Hegel and the strands of Marxism that aspired to scientific philosophy. One consequence of this confusion is that some philosophers, such as Lucio Colletti, who wish to resurrect the project of Marxist philosophy as scientific philosophy, have unfairly characterized Hegel as an anti-scientific philosopher whose influence must be excised from Marxist philosophy (Colletti 1979, 37).

¹⁸ It is also well known that Engels was deeply interested in the natural sciences (Kircz 1998). However, recent research has shown that the traditional image of a division of labour between Engels and Marx, with Engels being responsible for research in the natural sciences and Marx being responsible for research in the social sciences, is inaccurate insofar as it underestimates Marx's interest in the natural sciences (Saito 2017). Moreover, in terms of the collaboration requirement, it is difficult to think of a more influential intellectual partnership than the one of Marx and Engels.

represented the anti-thesis of the modernist conception of philosophy as science.¹⁹

Moreover, some of the early Bolsheviks, V.A. Bazarov (1874-1939), A. A. Bogdanov (1873-1928), A. V. Lunacharsky (1875-1933), P. S. Yushkevich (1873-1945), and N.V. Valentinov (1879-1964), adhered explicitly to the modernist conception of philosophy as science in its logical positivist form (Bakhurst 2018, 108). A. V. Lunacharsky is a particularly good example of a Marxist philosopher taking on the mantle of a modernist scientific philosopher because of his deep interest in Avenarius' empirico-criticism. Lunacharsky had attended Avenarius' lectures in Zurich, and he attempted to bring about a kind of synthesis between Marxism and Avenarius' philosophy (Lunacharsky 1967).²⁰ The same holds true for Valentinov who was explicitly inspired by Mach: "It seemed to me that a purge of concepts had to be carried out in Marxism, similar to the one carried out by Mach in physics and chemistry" (Valentinov 1968, 22).²¹

I am not arguing that the neglect of Hegelian-derived Marxist conceptions of scientific philosophy in contemporary North American academic philosophy should be attributed to Alan Richardson. On the contrary, I conceive of Alan Richardson's neglect of this strand of scientific philosophy, which developed by way of an immanent critique of Hegel's proto-modernist conception of philosophy as a science, as *symptomatic* of the neglect of Marxist strands of scientific philosophy in contemporary North American academic philosophy.²² Nevertheless, not all scholars of scientific philosophy have neglected the existence of Marxist strands within scientific philosophy. For example, Don Howard emphasizes both the indirect influence of Marxism on some philosophers of science in the 1920s and 1930s (Howard 2003, 26), as well as the existence of a direct strong Marxist influence on the Vienna Circle in the figure of Otto Neurath, who "regarded Marxism as a pre-eminently scientific and objective way of understanding the world" (Howard 2003, 38). Howard points to sociological factors such as McCarthyism and greater professionalization in explaining the decline of the "left-wing" logical empiricist conception of philosophy of science (Howard 2003, 72). He also points to the fact that in the American intellectual context, scientific objectivity was seen to be "fatally

¹⁹ For an argument to support the claim that Marx developed his mature conception of science by way of an internal or immanent critique of Hegel's conception of science, see (Murray 1998), although, elements of discontinuity must nonetheless be recognized (Stanley 1997).

²⁰ However, I should add that Lunacharsky conflated being a scientific philosopher with being a logical positivist. It is not at all clear that being a logical positivist is a necessary condition for being a scientific philosopher.

²¹ For an overview of Russian Marxist Machianism, see (Sheehan 2017, 122-126).

²² This neglect of Marxist strands of scientific philosophy is also evident in the work of other historians of scientific philosophy, e.g., Marxism is left out of Enrico Viola's taxonomy of scientific philosophies in the early twentieth century (Viola 2013).

compromised by the intrusion of social and political concerns” (Howard 2003, 74).

The most detailed account of the social, political and cultural transformations that led to the eclipse of the “left-wing” camp of logical positivism is the one provided by George A. Reisch (2005). Reisch argues that in the context of Cold War McCarthyism during the 1940s and 1950s, the Unity of Science movement came to be associated with the “red menace”. Indeed, certain aspects of the modernist conception of philosophy, such as the emphasis on collectivism in the sphere of intellectual production were associated with communism (Reisch 2005, 20).²³ The leading figure in the Unity of Science movement, Otto Neurath, was explicit about connecting his collectivist conception of scientific activity to his Marxism (Reisch 1997).²⁴ Moreover, since the unity of science was also a rallying call associated with Marxist philosophy, the program of the unity of science itself came under suspicion during the 1950s (Reisch 2005, 321).²⁵ These cultural and political transformations in the North American context led to the decline of the brand of logical positivism associated with Neurath and Frank, and the triumph of the apolitical conception of philosophy of science that was articulated by Reichenbach and Feigl (Reisch 2005, 283).²⁶ Reisch also argues that Cold War discourse influenced the subsequent development of philosophy of science in North America in other ways. For example, in more recent work, Reisch argues that the central motif of Kuhn’s *The Structure of Scientific Revolutions*, namely the concept of a “paradigm” and its centrality to what Kuhn describes as “normal science” was drawn from the discourse around “captive minds” during the Cold War (Reisch 2012; 2016a). Reisch argues that in developing the concept of a paradigm Kuhn was influenced by his mentor, James B. Conant, who had analyzed Soviet-Western interactions and misunderstandings as interactions between disconnected “universes of discourse” (Reisch 2016b, 46). Thus, in order to understand the development of philosophy

²³ In this regard, it is interesting to note that Kuhn’s philosophy of science re-emphasizes the significance of individual geniuses. For Kuhn paradigms shifts come about as a result of a breakthrough made by an individual genius (Reisch 1991, 267; Omodeo 2016, 30).

²⁴ For the characterization of Neurath as the leading figure in the Unity of Science movement, see (Reisch 2003).

²⁵ Note that due to the prevalent view amongst English speaking philosophers that “Western Marxism” represents Marxist philosophy as a whole, the unity of science has not been conceived of as a demand associated with Marxist philosophy. However, it is important to recognize that Marx himself was an advocate for the unity of science (Sheehan 2017, 50), and so were many “orthodox” Marxists, thus when Lukács rejected the unity of science and criticized Nikolai Bukharin for his alleged scientism (and was followed in this by succeeding “Western Marxists”), he was revolting against the “orthodox view” in Marxist philosophy during that time (Sheehan 2017, 253; Omodeo 2016, 21).

²⁶ Carnap is difficult to characterize, because despite his focus on the logical structure of science as opposed to the pragmatics of science (Uebel 2009), he was also politically active (Stump 2009), thus depending on how we understand what it is to be a politically engaged philosopher of science, we can characterize Carnap as a member of the left-wing of the Vienna Circle. For a helpful account of different ways in which we can speak of politically engaged philosophy of science, see (Reisch 2009).

of science as a sub-field of contemporary academic philosophy we must account for the influence of wider political and social currents.

We can also note in passing that while the label 'scientific philosophy' faded away from usage in North America to be replaced with the label 'analytic philosophy', the label 'scientific philosophy' continued to be used by Soviet philosophers well into the 1980s.²⁷ The point is that a history of scientific philosophy that ignores Marxist philosophy would be significantly incomplete and even misleading. In fact, it makes it difficult, if not impossible, to account for the fact that someone associated with the Vienna Circle such as Otto Neurath could think of himself as both a Marxist and a modernist scientific philosopher.²⁸ We also should not forget that the members of the Vienna Circle pointed to Marx as an influence in their *Wissenschaftliche Weltauffassung* (Neurath, Carnap, Hahn 1973, 304). Hence, if we wish to explain the rise of scientific philosophy, we should take into account strands of scientific Marxist philosophy in the nineteenth and twentieth centuries. At a minimum, we should acknowledge that without taking those strands into account, our history of the rise of scientific modernist philosophy in Europe would be incomplete. Moreover, subsuming some strands of Marxist philosophy under the category of modernist scientific philosophy also enhances the potential historiographic applications of the concept of modernist scientific philosophy. It enables us to adequately categorize some self-identified Marxist philosophers from the non-Western world (or the "Global South") who conceived of themselves as modernist scientific philosophers, such as Mahmoud Amin Al-'Alim in Egypt.²⁹ From the perspective of attempts to write a global history of philosophy, this is clearly a gain, since it provides us with a way to develop an account of philosophy in the "Global South" that takes seriously the idea that modernist-scientific philosophical movements were not and are not exclusively Western.

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²⁷ For example, in their *Principles of the Theory of the Historical Process in Philosophy* (first published in Russian in 1983), Oizerman and Bogomolov speak of Marxism as aiming at the creation of a "scientific, philosophic outlook upon the world, a principle of which is the unity of philosophic and non-philosophic theoretical inquiries" (Oizerman and Bogomolov 1986, 319).

²⁸ Although Neurath was not keen on referring to himself as a philosopher, but neither were Marx and Engels. In fact, one common property between the group of thinkers who are described as scientific philosophers by Richardson and the strands of scientific, modernist Marxist philosophy that I have referred to above is that both sets of thinkers were not very keen on describing themselves as philosophers.

²⁹ Al-'Alim is probably best known in the non-Arabic speaking world as a literary critic, but he was also a philosopher of science. Al-'Alim's most significant work on philosophy of science is his *Falsafat al-Mosadafa* [Philosophy of Chance] (1971). Unfortunately, none of his philosophical writings have been translated into English, but I am currently working on an English translation of his autobiography.

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