

Chapter 12

Philosophy of Science as First Philosophy

The Liberal Polemics of Ernest Nagel

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Eric Schliesser

(a) Political Science, Faculty of Social and Behavioural Sciences

University of Amsterdam

(b) Smith Institute for Political Economy and Philosophy

Chapman University

nescio2@yahoo.com

Abstract: This chapter explores Nagel's polemics. It shows these have a two-fold character: (i) to defend liberal civilization against all kinds of enemies. And (ii) to defend what he calls 'contextual naturalism.' And the chapter shows that (i-ii) reinforce each other and undermine alternative political and philosophical programs. The chapter's argument responds to an influential argument by George Reisch that Nagel's professional stance represents a kind of disciplinary retreat from politics. In order to respond to Reisch the relationship between Nagel's philosophy of science and his politics is explored and this chapter shows how both are anchored in what Nagel once called his 'contextual naturalism'—a metaphysics that resists imposing the unity of the world and treats all entities as embedded in a wider network of entities. Part of the argument traces out how Nagel's views on responsible speech and professionalism reflect a distinct understanding of the political role of philosophers of science.

Keywords: Ernest Nagel; cold war liberalism; responsible speech; philosophy of science; analytic philosophy

12.1. Introduction

In addition to being one of the pre-eminent philosophers of science of the twentieth century, and an influential PhD supervisor, Ernest Nagel was also a public intellectual, who for a generation was a kind of celebrity in the academy. Something of his status can be gleaned

from his role in the very high profile methodological discussion among economists stimulated by Milton Friedman's methodological writings (Nagel 1963). As Fritz Machlup (1963, p. 204) puts it in his introduction to the symposium, Nagel is treated as an "exogenous" methodologist, an eminent philosopher of science invited to *referee* one of our most fundamental methodological controversies" (emphasis added).

Undoubtedly, Nagel's early *An Introduction to Logic and Scientific Method* (1934) co-written with Morris R. Cohen, which was well known to economists,¹ and Nagel's *The Structure of Science* (1961) also contributed to his stature among the economists. For example, in contributions to the discussion, Paul Samuelson (1965) called attention to the significance of the latter, especially, pp. 79-90. But I suspect he was already well known due to his often polemical book reviews and essays in which he took the measure of many intellectual currents of the age. These writings were collected in two volumes: *Sovereign Reason* (1954; hereafter: SR) and *Logic Without Metaphysics* (1956; hereafter: LWM). I use 'the Corpus' when referring to both collections. The Corpus appeared with a trade publisher, The Free Press,² and both carried the same sub-title: "other studies in the philosophy of science."

The significance of the identical sub-title(s) may elude more recent readers. For, while we tend to think of philosophy of science as a fairly focused enterprise—(characterized by e.g., "the clarification of scientific procedures" (SR 307) and the stress-testing of concepts (SR 306)—, for Nagel, philosophy of science is a kind of first philosophy: "the boundaries of the philosophy of science are in fact the boundaries of philosophy itself" (SR 298). So, rather than indicating a limited focus, these sub-titles suggest the wide scope of the forty-six collected essays in SR and LWM, which range from metaphysics, philosophy of the special sciences, logic, aesthetics, political philosophy, early analytic philosophy, and the history of pragmatism amongst other topics. Nearly all the papers also intersect with material we would still recognize as philosophy of science.

This short chapter cannot hope to do full justice to forty-six sometimes complex chapters ranging from major self-standing essays on seminal thinkers to short book-reviews and a number of connected chapters in between. Even so, despite the diversity of topics

¹ In his 1942 textbook *The Theory of Competitive Price* (New York: MacMillan) George J. Stigler refers to Cohen & Nagel's *An Introduction to Logic and Scientific Method* as "recommended readings" at the end of his introductory methodological chapter. I thank David Levy for scanning relevant pages on my behalf. For more on the context, see Schliesser (2011).

² Founded in 1947, the Free Press was relatively new then. While it became increasingly known for a more conservative list, initially it was quite eclectic in its selections. Max Weber, Durkheim, Bernard Russell, and Morris R. Cohen were included among the authors it published.

discussed, I argue that a major strain of Nagel's polemics³ in the Corpus has a two-fold character: (i) to defend liberal civilization against all kinds of enemies. And (ii) to defend what he calls 'contextual naturalism.' And (iii) I claim that (i-ii) reinforce each other.⁴ In particular, I clarify how they reinforce each other and how they are supposed to undermine alternative political and philosophical programs. In what follows, I am less interested in tracing Nagel's sources than in the significance of his polemics. In section 12.2, I put my cards on the table and explain my interest in Nagel. In particular, I explain that I frame my argument as a response to an influential argument by George Reisch that Nagel's professional stance represents a kind of disciplinary retreat from politics. In section 12.3, I discuss the relationship between Nagel's philosophy of science and his politics. In section 12.4, I deepen this analysis by showing how it is anchored in what Nagel once called his 'contextual naturalism'—a metaphysics that resists imposing the unity of the world and treats all entities as embedded in a wider network of entities. In 12.5 I conclude by responding to some objections. Part of my argument traces out how Nagel's views on responsible speech and professionalism reflect a distinct and easily misrepresented understanding of the political role of philosophers of science.

12.2. Nagel and the Retreat to the Icy Slopes

The Corpus I discuss was written between 1935-1954. For my present purposes this era matters for two reasons: first, at the start of the period it was by no means obvious whether liberalism and liberal democracy would survive in competition with Marxism, fascism, and national-socialism. In 1943, Nagel's own view of the matter is downright alarmist: it's clear he thinks it's a "period of social crisis" and "in the midst of actual and impending disaster" (SR 18; see also "the mounting economic and political tensions of our age," further down the page).⁵

³ Nagel does not use 'polemic' very often. Indeed, when he criticizes Dewey's "logical writings" he calls them "sharp polemics" (SR 137). But Nagel is not criticizing Dewey's logical writings because they are polemical but because they misfire (either because they are aimed at the wrong target or because Dewey seems to miss the problems in his own conception). And, in fact, Nagel commends Dewey's "use of polemic" because it illustrates "that socialized, cooperative method of science for which he is a spokesman and a pleader." (SR 137) I treat this claim as an instance of Nagel's self-description, too.

⁴ I do not mean to suggest that (i-iii) exhaust the historical significance of these essays. Elsewhere I have argued that "Impressions and Appraisals of Analytic Philosophy in Europe" (republished in LWM) is significant to the sociological and conceptual founding of analytic philosophy. See Schliesser (2013).

⁵ See also the first sentence of the 1947 review of Morgenthau's *Scientific Man vs Power Politics*: "The defeat of human aspirations following profound social upheavals is frequently accompanied by loss of confidence in rational methods as ways of resolving the problems of society." (LWM 377)

By the end of the period, a (perhaps initially fragile) transatlantic, *Pax Americana* had secured liberal hegemony in the Atlantic world as the cold war developed. Along the way, how to think about liberalism was re-thought. My interest is to mark some features of Nagel's philosophy and polemics that illuminate this rethinking of liberalism. In general this period is of interest for liberal theorists for two reasons: first it is the age of New Deal and Bretton Woods; second it is the period in which neo-liberalism is developed. And while it is natural to assimilate Nagel to the former, Nagel's position is sufficiently distinct to deserve some attention.

Second, during that same period, and roughly the same geography, a heterogeneous number of schools—some originating in Cambridge, Vienna, Berlin, and Warsaw—, had merged with what I call the 'scientific wing of pragmatism,' and students of C.I. Lewis and Morris Cohen, to develop what is known as 'analytic philosophy.' As I have argued elsewhere (Schliesser 2013), and which motivates my present interest, I take to be Nagel to be (one of) the prophet(s) of analytic philosophy who helped create, conceptually and sociologically, the new movement of philosophy.

To be sure, the relationship between these two reasons may be contingent, and I do not argue for causation. Even so, the Corpus helps reveal the significance of Nagel in both. So, for example, Misak (2013, p. 116) calls "Nagel, perhaps Dewey's best graduate student" in her influential, *The American Pragmatists*. She discusses him as "the paradigm of an analytic, logically inclined, philosopher of science in America" (2013, p. 150). But while she uses some of Nagel's writings throughout her work in discussing other thinkers, and hints, correctly in my view, that he may be intellectually responsible for the sociological synthesis between logical positivism and (the scientific wing of) pragmatism, (Misak 2013, p. 163) she devotes little space to him.⁶ In what follows I do not argue, anew, for the claim in the previous sentence. Rather I reinforce the claim by focusing on Nagel's polemics.

In many ways my analysis of the significance of Nagel's intellectual coalition-building and polemics echo much of what Reisch (2005) had already documented in *How the Cold War Transformed the Philosophy of Science*. But I argue that Reisch misunderstands Nagel's position by claiming that "he was resigned to quietism and disengagement. Only political and economic restructuring, and not resources offered by philosophy, could advance a "world community" or reduce international tensions" (2005, p. 311). While from Reisch's

⁶ One may, correctly, note that Philipp Frank and Charles Morris were as important as Nagel in promoting the congruence of pragmatism and logical empiricism. But on my account (Schliesser 2013) Nagel created the conceptual and sociological basis for this. I thank Ádám Tuboly for discussion.

perspective this is not wholly false, on my more liberal view of Nagel, the political and economic restructuring has to be modeled on a certain conception of science, as presented by the philosophy of science, which itself is ground on a particular conception of metaphysics—Nagel’s contextual naturalism—which grounds and mirrors a particular pluralist conception of society. In addition, Reisch misses Nagel’s view on the constructive role of a future analytic philosophy in this because he overlooks his views on responsible speech. Or so I argue below.

To be sure, I am not the first to note to Nagel’s liberalism. For example, Don Howard critically notes the strain of liberalism I identify in Nagel (and Nagel’s role in the professionalization of philosophy). But he too criticizes Nagel for giving up on *science*’s role in the “selection of ends”. He charges, while channeling the ghost of Dewey, that this leaves “the selection of ends as merely a matter of subjective preference something Dewey regarded as one of the lingering ill effects of the laissez faire liberalism of the nineteenth century” (2003, pp. 60-61). Note that this position is not quietist; it is, for example, compatible with all kinds of (to extend the metaphor) individual or social entrepreneurial activity in the setting of ends. In fact, Nagel’s position does leave an important role for the philosopher of science not in setting ends, but in helping the community to orient itself to the right sort of ends. Or so I argue now.

12.3. The Tasks of the Philosopher of Science

For Nagel, in “The Perspectives of Science and the Projects of Man,” science shapes the broader culture in two distinct ways: first, as the fount of technologies and medicines. Second, by challenging established beliefs and intellectual habits (SR 297). And while the former is more emphasized, not the least by scientists in their appeals for resources (SR 296), the latter can also help re-shape (amongst others) our “basic aspirations,” our “moral commitments,” and “the principles” by which “actions” are evaluated (SR 297).

These two facts generate a “threefold task” for philosophy: (i) clarifying the bearing of trends in scientific inquiry upon pervasive conceptions of humanity’s place in nature; (ii) making explicit the intellectual methods by which responsibly held beliefs are achieved; and (iii) of interpreting inherited beliefs and institutions in the light of current additions to knowledge. (SR 297-298) All three tasks involve philosophy of science.

While we tend to think of philosophy of science as a fairly focused enterprise (characterized by (ii)) for Nagel, philosophy of science becomes, as noted above, first philosophy: “the boundaries of the philosophy of science are in fact the boundaries of

philosophy itself” (SR 298). And while (i) speaks to what we may call the existentialist call to philosophy, the third (iii) involves, more dangerously, philosophical activity within the life of her (imagined) community, that is, political philosophy or social theory of a certain sort.⁷ These (i)-(iii) can be connected of course: philosophy becomes the spokesperson of mankind’s existential place in the order of things in light of evolving scientific understanding of nature.

There is a crucial passage that reveals some of the internal connections between Nagel’s philosophy of science and political theory. To understand it fully we must grasp that for Nagel in the wake of Einstein, the “classical conception of scientific knowledge” (SR 302) had to be replaced with something new, which I’ll dub a ‘post-classical conception of science.’ This classical conception involves three commitments: “(1) Genuine scientific knowledge is demonstrative knowledge, and science seeks to “save the phenomena” [...] (2) there must be transparently luminous universal truths which the intellect can grasp as self-evident. (3) The basic premises of a science must be necessary truths, which are better known and more certain than anything explained by them” (SR 302). By contrast, the post-classical conception of science is fallibilist, embraces the holistic significance of what is now known as Duhem-Quine underdetermination, and is aware of possible incommensurabilities.⁸ Nagel then comments:

Scientific knowledge does not depend on the possession of an esoteric capacity for grasping the necessary structure of some superior reality, nor does it require modes of warranting beliefs which are discontinuous with operations of thought, identifiable and effective in the ordinary affairs of human life. The achievements of science are the products of a cooperative social enterprise, which has refined and extended skills encountered in the meanest employments of the human intellect. The principles of human reason, far from representing the immutable traits of all possible being, are socially cultivated standards of competent intellectual workmanship. The life of reason as embodied in the community of scientific effort is thus a pattern of life that generates an autonomous yet controlling ideal. That ideal requires disciplined dedication without servitude to any ultimate authority, imposes responsibility for performance upon individual judgment but demands responsiveness to the criticism of others, and calls for adherence to a tradition of workmanship without commitment to any system of dogma. To many commentators, the ideals realized in the enterprise of science are also the ideals which are indispensable to the successful operation of any society of free men. Many thinkers, indeed, like John Dewey in America, have

⁷ This danger means that sometimes philosophers may require prudence. I explore this a bit more when I discuss Nagel’s views on responsible speech below.

⁸ This survives into his later *Structure*, and clearly is in the background of Kuhn’s *Structure*. See, for example, Bird (2004).

based their hopes for the future of mankind upon the extension of the habits of scientific intelligence to every stratum of communal life and to every form of social organization. (SR 306)

The quoted passage is important for two main reasons: first, because Nagel rejects the cult of genius and thinks that science is a collaborative enterprise, which involves the systematic and socially sustained refinement of ordinary cognitive processes. So, rather than seeing a scientific society as a means toward a technocratic hierarchical elite of supermen (e.g., *Brave New World*), it is presented as fundamentally egalitarian in two ways: it is attainable by ordinary people and it has a relatively flat structure. And so this makes sense of the Deweyian ideal—which I also attribute to Nagel—that society needs to be modeled on, and shaped by, science as democratic in a non-trivial sense.⁹

This intellectual, egalitarian sensibility¹⁰ informs Nagel’s criticism of a whole range of opposing views (some of which he describes as ‘malicious’) that rely on either the intuition or insight of the special few (e.g., Hans Morgenthau’s decisive statesman (LWM 377-382; or Aldous Huxley’s pure mystics (LWM 389-393) or on the authoritative teaching of a privileged institution (e.g., the neo-Thomism thinkers of the Catholic church (SR 27-31))¹¹ or require a method that Nagel claims is non-transparent (Marxist dialectical materialism (SR 45-46)). Many of Nagel’s targets combine more than one of these elements (e.g., Marxists that are obedient to the Party’s version of dialectical materialism (LWM 398)) or Thomists that rely on “superior...metaphysical wisdom” (SR 31).¹² As he puts it, “perhaps no intellectual tendency is more dangerous than that accompanying the claim that knowledge of human affairs is the exclusive property of men endowed with a “higher insight”—which is not subject to the control of well-established experimental methods” (Nagel 1938, 55).¹³

Second, in the idea that science is a model for political life, Nagel here anticipates Michael Polanyi’s reflections on the way the ‘republic of science’ can be a model for a ‘body

⁹ In light of LWM 247ff, I would expect that Nagel was familiar with Merton (1942), but it is noticeable that Nagel avoids the kind of characterization we find in Merton (1942). I thank Treavor Pearce for discussion.

¹⁰ In modern scholarship this is often treated as *methodological* analytic egalitarianism (MAE) that was given wider currency by Peart and Levy (2009). A key feature of MAE is, to simplify, that for modeling purposes, agents are at least initially treated as roughly equal; and that any differences one attribute to agents are a consequence of their interactions and environment. In recent philosophy of science, we find versions of MAE in the Zollman school of formal epistemology of science, e.g., Bright (2017); and, more indebted to Peart and Levy, Schliesser (2018). Nagel’s commitment to MAE has metaphysical foundations which I will explore in the next section.

¹¹ This also informs some of Nagel’s impatience with and suspicion of the Wittgenstein circle (LWM 206).

¹² For the significance of Nagel’s stance toward the development of what became ‘analytic philosophy’, especially, the use of the “keen, shining sword helping to dispel irrational beliefs” (LWM 197) and the “obscurantism” of “traditional philosophy” (LWM 196).

¹³ Nagel (1938) falls outside the Corpus and in this paper I only use it as supporting evidence. Why Nagel decided to leave it aside is worth further investigation. I thank Ádám Tuboly for discussion.

politic.’ I mention Polanyi’s approach to the philosophy of science because it represents an influential stream in cold war liberal thought and is, in certain respects, a legitimate target for the quietist critique Reisch directs at Nagel. Polanyi emphasizes the significance of individual, independent judgment in science and how the interaction of these judgments generates—like a market-place of ideas (Polanyi takes the analogy between markets and science very seriously)—a spontaneous order. While the republic of science is (despite the generation of hierarchy within) relatively flat, it has authority *over* the public in Polanyi’s scheme.¹⁴ But while instantiating a principle that one also finds in market relations, the republic of science also provides a model for society as a society of explorers (whose goal is, somewhat surprisingly, self-improvement).¹⁵

By contrast, on Nagel’s model science is *not* a method of silencing others behind an authoritative consensus familiar from Kuhn’s philosophy of science and the liberal political theory of the second half of the twentieth century.¹⁶ Rather, for Nagel, science is a social mechanism by which one becomes *responsive* to reasons and participates in a social division of labor that both improves each of our cognitive functioning collectively and individually as well as being in some sense self-legislating. And so, this helps generate (through its spokesperson in philosophy of science, and in lived experience) an “attitude, at once critical and experimental, toward the perennial as well as the current issues of human life” (SR 307).¹⁷

In fact, Nagel is explicit that philosophy of science so understood, is “a champion of the central values of liberal civilization”. And while in the early 1950s the survival of liberal civilization was more secure than it had been in a generation, it is clear, as I argue in subsequent sections, that securing such a civilization is one of Nagel’s main aims in all his polemics. And, of course, by providing freedom of thought, liberal civilization is conducive to a humane philosophy of science (understood as first philosophy):

The basis for a general outlook on the place of man in nature is supplied by detailed knowledge of the structure of things supplied by the special sciences— an outlook that contemporary philosophy of science has helped to articulate and defend. In the perspective of that outlook, the

¹⁴ See Polanyi (1962, p. 60): “The authority of scientific opinion remains essentially mutual; it is established between scientists, not above them. Scientists exercise their authority over each other. Admittedly, the body of scientists, as a whole, does uphold the authority of science over the lay public.”

¹⁵ As Polanyi (1962, p. 72) recognizes, his model “society does not offer particularly wide private freedoms. It is the cultivation of public liberties that distinguishes [his] free society.”

¹⁶ See Schliesser (2012) and (2016). For important nuance, see Hart (1998).

¹⁷ Trevor Pearce called my attention to the fact that this echoes Dewey (1939). There are also echoes to the republican tradition of inspired by Rousseau.

human creature is not an autonomous empire in the vast entanglement of events and forces constituting the human environment. Nevertheless, no antecedent limits can be set to the power of scientific reason to acquire theoretical mastery over natural and social processes. Every doctrine which pretends to set such limits contains within itself the seeds of intolerance and repression. Moreover, in the perspective of that scientifically grounded outlook, human aspirations are expressions of impulses and needs which, whether these be native or acquired, constitute the ultimate point of reference for every justifiable moral judgment. The adequacy of such aspirations must therefore be evaluated in terms of the structures of human capacities and the order of human preferences. Accordingly, though the forces of nature may one day extinguish the human scene, those forces do not define valid human ideals, and they do not provide the measure of human achievement. But an indispensable condition for the just definition and the realization of those ideals is the employment and extension of the method of intelligence embodied in the scientific enterprise. A judicious confidence in the power of reason to ennoble the human estate may seem shallow to an age in which, despite the dominant position in it of scientific technology, there is a growing and pervasive distrust of the operations of free intelligence. It may indeed be the case that the temper of mind essential to the exercise of such intelligence has no immediate social future. But the cultivation of that intellectual temper is a fundamental condition for every liberal civilization. By making manifest the nature of scientific reason and the grounds for a continued confidence in it, contemporary philosophy of science has been a servant of men's noblest and most relevant ideals. (SR 307-308)

There is a lot going on in this passage. Recall that for Nagel philosophy's tasks are (i) clarifying the bearing of trends in scientific inquiry upon pervasive conceptions of humanity's place in nature; (ii) making explicit the intellectual methods by which responsibly held beliefs are achieved; and (iii) of interpreting inherited beliefs and institutions in the light of current additions to knowledge. (SR 297-298) Nagel assigns here two new tasks to philosophy.

First, philosophy of science has (iv) the task of making manifest "the grounds for [...] continued confidence" in the nature of scientific reason. The future orientation of this task is quite striking.¹⁸ What could merit such confidence? Lurking in Nagel's program is the presupposition that either skepticism about social induction from past to future can be defeated or, well, that we can be persuaded to ignore its challenge. No argument is offered for this.

Second, "philosophy of science" helps (v) "to articulate and defend" the basis "for a general outlook on the place of man in nature is supplied by detailed knowledge of the structure of things supplied by the special sciences". This follows naturally from task (i). I wish to make two connected observations about the present significance of (v). First, it can be

¹⁸ This goes well beyond (ii), which is backward-looking; (iv) is forward looking.

taken to foreshadow the professional turn in philosophy of science lamented by Reisch and Howard; for, it requires considerable detailed knowledge of and engagement with rather esoteric areas of science. This inevitably gives rise to specialization of various kinds.

How much specialization is required is a complex matter. For example, Nagel's contribution to the methodological debate prompted by Milton Friedman among the economists mentioned at the start of the present chapter is at high enough generality that not much special knowledge of economics is required. But even so, at various points Nagel shows subtle command not just over what some prominent economists had to say about Friedman's views,¹⁹ but, also, and more interestingly, distinguishing "many formulations of neoclassical theory" from nearby possible versions (pertinent to the interpretation of Friedman's article).²⁰

Second, this philosophy of science focused on the special sciences does not merely describe ("articulate") the foundations of a general outlook on the place of man in nature, but it also advocates for it ("defend") it. So, this vision for philosophy of science is a *normative* enterprise in some clear sense.

Now admittedly, that "human aspirations are expressions of impulses and needs which [...] constitute the ultimate point of reference for every justifiable moral judgment" leaves out a lot of detail, about the nature, sources, and content of this normative orientation for philosophy of science. And so I would grant the critics that Nagel's position is itself under-described.

So, while it is clear that Reisch and Howard are correct that for Nagel science does not set ends, science does play a role in what we may call the *fittingness* of these human aspirations. That is, rather than merely seeing science as a species of instrumental reason, providing the mechanism by which social ends are attained, Nagel clearly thinks that science, as a collective enterprise, and through its philosophical interpreters, also helps make clear if the collective ends are themselves fitting for creatures like us. As he puts it in "Notes Toward a Naturalistic Conception of Logic," a naturalist's task (vi) is to help humanity "wisely" base mankind's "ideals upon the capacities and limitations of his own body." (LWM 52)

This is not an especially quietist program. Nagel himself understands it as facilitating a form of "liberation" from what he calls an "unfree intelligence" (LWM 52). Science plays an "indispensable" role in intelligent and pluralist social decision-making in Nagel's hands ("the just definition and the realization of those ideals is the employment and extension of the

¹⁹ He discusses Koopmans (1957, p. 140); see Nagel (1963, p. 219).

²⁰ See, especially Nagel (1963, p. 218), and the sophisticated references to Knight and Samuelson.

method of intelligence embodied in the scientific enterprise” (SR 307-8)). For the point of his democratic vision is to “acquire theoretical mastery over natural and social processes”. From the perspective of a more laissez faire attitude (here represented by Polanyi and Hayek) the aim of “mastery” over social processes is horrifying.

At this point of my argument I hope to have demonstrated that Nagel is a rhetorical forceful advocate of liberal society. His vision of liberal society and his understanding of science in it is both distinct from the socialist programs offered by Neurath²¹ and the more classical liberal positions advocated by Michael Polanyi and Hayek which, for present purposes only, I have treated as exemplars of the ‘quietist’ position.²² While it would be tempting to describe Nagel as a New Deal progressive, he shares with Dewey a preference for a more bottom up conception of science and rejects the top-down collectivism and managerialism one may discern in the New Deal. And that’s because of the fundamental importance of pluralism in Nagel’s thought.

12.4. Contextual Naturalism and Pluralism²³

While I tend to see Nagel as the leader of the scientific wing of twentieth century pragmatism, in his essay, “Philosophy and the American Temper,” (hereafter: American Temper) Nagel describes pragmatism as a decaying research program (SR 53). This essay was written for a “European audience, and appeared in a French translation in the *Chronique des Etats-Unis*, a bi-monthly publication of the American office of Information in Paris, In April 1947,” (SR 309). I have found almost nothing about this periodical, but it stands to reason it was an instrument of the US State Department or the CIA. I leave to others reflection on the very idea of speaking about America, or the idea of America, to a *European* audience on the ruins of two world wars.

I assume here that it was written before the cold war was full reality, although Nagel was already hostile to Marxism (see, e.g., the scathing review of Haldane LWM 331-333). So, while anachronistic, it would not be wholly misleading to call it ‘a philosophy for cold war liberalism.’ “American Temper” is a short essay. Part of the argument of the essay is a

²¹ Not all socialist programs are alike. Nagel is scathing about top-down unity of science proposed by Cornforth (LWM 399); he is much sympathetic to the Neurathian ‘unity of science’ (in Nagel 1938), presumably because it more collaborative and democratic. I thank Ádám Tuboly for discussion.

²² From my perspective, it is no surprise, then, that Nagel offered a fierce criticism of Hayek (LWM 361-368). This review is primarily directed against Hayek’s view that the “extension of the methods of the natural sciences into social inquiry is an abuse of reason” (LWM 368). But it seems pretty obvious that Nagel’s sub-text is that adopting the methods of the natural sciences, when properly understood and conceptualized, in social inquiry does not lead to the (now quoting Hayek) “hubris of collectivism” (LWM 363).

²³ For the deeper roots of Nagel’s contextual naturalism, see also chapter 6 of Pearce (2020).

denial that there is a one, unified, distinctive American philosophy. In practice many philosophical programs flourish Stateside (SR 50-52; Nagel shows no interest, alas, in indigenous thought.)

However, in “American Temper”, Nagel describes one intellectual current, even movement, “contextual naturalism,” in favorable terms. That here Nagel is describing his own commitments as a 'contextual naturalist,' we can accept on no less authority than Isaac Levi (1998, p. 641; 2005, p. 717; Levi was a student and colleague of Nagel). While Nagel’s association with contextual naturalism was noted by contemporary readers and reviewers of Nagel’s essay, the term never caught on.²⁴

In a beautiful essay, Lawrence Cahoon (2016) makes an excellent case that Nagel's contextual naturalism is very indebted to Morris Cohen.²⁵ In “American Temper”, Nagel himself grants (53-54) that it grows out of later writings of Dewey, Sheldon’s (1942) *America’s Progressive Philosophy*, which is a species of process philosophy, and a collection edited by Krikorian (1944) *Naturalism and the Human Spirit*, which includes many philosophers associated with Columbia at mid century. Despite the vicinity of his thought to Dewey’s, Nagel himself disowns the ‘pragmatist’ label because he lacks commitment to the “technical pragmatic doctrines concerning the nature of truth or the function of knowledge” (SR 53).

The cardinal thesis of contextual naturalism is “the essentially incomplete fundamentally plural character of existence, in which no overarching pattern of development can be discerned, and which qualitative discontinuities and loose conjunctions are as ultimate features as are firm connections and regular cycles of change” (SR 54). Nagel puts this plural character in another related fashion as follows, “the manifest plurality and variety of things, of their qualities and their functions, are an irreducible feature of the cosmos” (LWM 7).²⁶ This is now a relatively unfashionable, metaphysical doctrine. But we can hear in its pluralism echoes in the (dappled world, disunity) commitments of those associated with the

²⁴ See the book review by Bidney (1955). Contextual Naturalism is listed as one of the forms of naturalism in the survey by Riepe (1958, 734). An interesting exception is Frank’s last book, *The Humanistic Background of Science*, where Frank discusses Nagel under the label “contextual naturalism” in various sections (see, especially, pp. 271-274). I thank Ádám Tuboly for alerting me to this.

²⁵ For the development of Nagel’s naturalism, see Sander Verhaegh’s chapter in this volume.

²⁶ This helps explain Nagel’s polemic with, say, Blanshard, against the reality of internal relations and monism in the essay, “Sovereign Reason” (SR 266-295). Nagel’s view echoes James (1977). I thank Trevor Pearce for alerting me to this.

Stanford School of the Philosophy of Science.²⁷ Since Nagel was Suppes' supervisor the connection is not wholly coincidental.²⁸

The point of calling it 'contextual' is explained by Nagel in terms of the "emphasis upon the contextual conditions for the occurrence and for the manifested properties of everything whatsoever—upon the fact a quality an objective constituent of nature even though its existence depends on the relations in which it stands to other things" (SR 55). This generates an anti-reductionism and a general mistrust of what we may call eliminativist strategies.

Now, in the previous section I noted that Nagel's philosophy of science is not attracted to the idea that science is a means of silencing others in the name of a unified authority. And while science contains differential expertise and skill in virtue of the evolving social division of labor and standards, Nagel views science more as an open-ended conversation responsive to criticism and reasons. This both echoes the nineteenth century, classical liberal emphasis on "government by discussion" (a term invented by Bagehot), of which Knight was the most prominent defender in the period under review (Emmett 2020);²⁹ and anticipates Habermas' focus on deliberative democracy. In fact, after Habermas later promoted deliberative democracy, it has been natural to see this as continuous in some respects with the earlier liberal tradition (see Roháč, 2012, Gutman and Thompson 2009, p. 9). My claim is that Nagel has a natural place in this broader liberal current.

The point is echoed in "American Temper": science as understood by contextual naturalism "involves the continued criticism of its findings in the light of evidence capable of public inspection" (SR 56). And in this sense Nagel views science as a "responsible" (SR 56) model for democratic society worth having. To what degree the science of our day would still be thought of as such an apt model is worth asking.

In the previous section I noted that Nagel anticipates the methodological egalitarianism (MAE) we also find in contemporary strands of philosophy of science. Nagel's adherence to MAE is not merely political and methodological; it is ground in, and an expression of his (contextual naturalist) metaphysics. For Nagel, claims that "this gift of

²⁷ See Cartwright (1999); Dupré (1995). On the Stanford School, see Cat (2017), especially <https://plato.stanford.edu/entries/scientific-unity/#StanScho>. The position also anticipates what has become known as "Minnesota Pluralism" (associated with Helen Longino, Ronald Giere, and Ken Waters). See Solomon and Richardson (2005, p. 218).

²⁸ Suppes (1994/2012) wrote a lovely, informative obituary of Nagel, but he does not speak about Nagel's metaphysics. I warmly recommend the interview conducted by Herfeld (2016), but she did not ask about Suppes' attitude toward Nagel's metaphysics.

²⁹ The claim about Bagehot is made by Emmett (2020, p. 303). Not all references to Knight are positive in Nagel (see SR 32n).

intelligence man owes to the organization of his body and the character of his environment” (SR 56). This suggests that Nagel treats MAE as grounded, at least in part, in facts of ontology (the human body).³⁰ One may object that Nagel’s use of ‘body’ and ‘environment’ is not ontological in character, but merely treating empirical facts.³¹ But, as noted before, it is Nagel, who focuses on the “irreducible feature of the cosmos.” So, I claim Nagel invites the ontological interpretation.

From a distance one might expect that such an embrace of MAE leads to a homogenizing picture of human nature. But for Nagel the diversity of environments gives rise to diversity of social organizations and so (there is an echo of Max Weber here—see Beiser 2011, p. 558) a diversity of human needs and ends. This pluralism also expresses the “democratic way of life,” which resists prescribing “for its citizens a set of beliefs concerning the nature of the cosmos and man’s place in it” (SR 50). At the end of *American Temper*, Nagel concludes with a passage crucial for my present purposes:

The possession of needs and preferences, and the exercise of reflection upon them in the interest of fulfilling and harmonizing them, are as natural to man as is, for example, the property of a magnet to repel or attract another magnet. In any event, it is in the radical plurality of men’s needs and in the limitations which their physical and social environment impose upon their fulfillment, that contextualistic naturalism locates the source and urgency of moral problems. Accordingly, it does not conceive the primary moral problem to be that of discovering or actually instituting some fixed set of ethical norms valid everywhere and for all time. For basic moral problems are plural in number and specific in character, and are concerned with the adjustment, in the light of causes and consequences, of competing impulses occurring in specific environmental contexts. There can therefore be no general or final solution to the moral predicaments of mankind; the moral problem is the perennial one of finding ways and means for eliminating needless suffering and for organizing in a reasonable manner the energies of men. (SR 56)³²

This is a rejection of ethics as a monistic, authoritative discipline imposing normative rules on the rest of us. Rather Nagel views ethics more in the spirit of what is now known as ‘mechanism design.’ That is, its task is to find local, temporary ethical solutions to practical problems in light of our plural commitments in “specific environmental contexts”. If there is an overarching theme it is the elimination of needless suffering. Obviously this slogan does

³⁰ The significance of the human body might make one suspect that Nagel could be a fellow traveler of, say, progressive embrace of eugenic practices. But as far as I can tell he resists this lure, and is scathing about racialized eugenics (e.g., SR 32; in context, this is partial concession to the neo-Thomist critique of modernity).

³¹ I thank an anonymous referee for the objection.

³² See Pearce (2020, p. 282) for the roots of this material in Dewey and Mead.

not settle important questions (whose suffering will count; by whose light needless; and at what cost elimination?, etc.), but it gives a sense of the spirit of the project which is really about the never-final organization of the energy of human-kind. The focus on avoiding suffering anticipates the strain of liberalism we find in Shklar's liberalism of fear (1989).

We can also see that Nagel's vision for the philosophy of science as a template for a democratic society is itself ground in a pluralist metaphysics in which no single perspective is ultimately privileged, but each has standing. In addition this metaphysics provides a kind of template for society: each individual has objective existence, but is simultaneously socially embedded, and improved by participation in the practice of receiving and offering mutual criticism in light of socially available facts.

As Nagel puts it in summarizing the revolution in thought influenced by Dewey, "we are suspicious both of large-scale generalizations in social theory and history which are supported primarily by appeals to alleged necessities of thought, and also of statistical and other factual studies which are not controlled by clearly formulated theoretical assumptions grounded in ascertained facts. We are less easily taken in by the claims of scientific workers that their most recent conclusions are revelations of a final reality" (SR 119). This is very much the spirit of trial and error (SR 307) and piece-meal engineering (now primarily associated with Popper 2020).³³

Given that circumstances are constantly changing this is a philosophy of forever-unfinished-business, self-conscious of the fact that any proposed solution in the moment will seem archaic at a later date.³⁴ As Nagel puts it:

[C]ontextualistic naturalists exhibit a profound distrust of philosophic systems which attempt to catch once for all the variegated contents of the world in a web of dialectical necessity. They are keenly conscious of the limitations of purely formal analysis even when they engage in it. For they recognize that a logic, no matter how subtle, provides no warrant concerning matters of fact unless it is supported by controlled observation. Indeed, they sometimes show an almost pathological fear that those concerned with formal analysis may be deceived into supposing that nature is as coherently organized and as simple as are their intellectual constructions. (SR 54)

³³ While some (including Popper and Hayek) have a tendency to treat Popper as a fellow traveler with Austrian economics, there is no doubt that Popper views are compatible with elements of the New Deal or social democratic sensibility. On the role "working hypothesis" in pragmatism, see Pearce (2020, pp. 329-331).

³⁴ While I do not deny that in his bottom up sensibility, Nagel is closer to Dewey than he is to Walter Lippmann (who has a fondness for the circulation of elites through society and government), they (Nagel and Lippmann) share in a liberalism that embraces what I have called a 'spirit of adaptation' in Schliesser (2019).

Contextual naturalism is self-aware of the fact that the assumption of nature's coherence may be more an artifact of one's (formal) models, or a regulative assumption, than an established metaphysical fact. The self-understanding of contextual naturalism is one of self-disciplining³⁵ and forms of intellectual/metaphysical humility (captured by the slogan 'logic without ontology').³⁶

But by this I do not mean to suggest contextual naturalism is modest. Nagel calls his own contextual naturalism "sane and reasonable" and a "sober" alternative to more fashionable and fanciful philosophies. (SR 57) There is an unapologetic willingness to develop, and suddenly we are in a Nietzschean register, the "Apollonian" edifices of "civilization" (SR 57). But this way of framing it, and the acknowledged pathology—the fear that controlled technique may facilitate a form of intellectual self-deception—, suggests recognition of the fact that some forces in our environment, including our own impulses, have Dionysian roots that may haunt us. Not unlike Carnap, Nagel's analytic head is conjoined to the heart of a disciplined or responsible romantic.³⁷

12.5. Objections & Conclusion

In this final section I respond to a criticism that probably has occurred to many discerning readers. The critic may grant that Nagel's liberalism does not naturally belong in the camp of quietist laissez-fair liberalism (which I have associated, perhaps unfairly, with Polanyi and Hayek above). Such a critic may also grant that Nagel's rather broad conceptions of the philosophy of science (and logic) are compatible with at least some tasks (i-vi) that have substantial political significance. But Nagel's vision, so the critic could argue, is also compatible with a kind of retreat into the ivory tower and a professionalization of philosophy of science that, in practice, is just specialists talking to each other (over minutiae, one can add for good measure.)

So, from the perspective of the critic it is no surprise that in 1935 Nagel wrote:

³⁵ Part of the contrast between pragmatism and contextual naturalism, is the fact that the latter contain not just the keenest, but many of the "best disciplined minds among the younger men" (53). For the contemporary significance of discipline within philosophy, see Williamson (2006, esp. p. 182).

³⁶ Crucially, for Nagel 'logic' or the 'inclusive sense of logic' studies the "methods employed by men aiming at stable knowledge, assays their efficacy in achieving this aim, examines the role of critical thought in every department of human activity, and institutes a rigorous inquiry into conditions upon which the significance and effective operation of discourse rests. It is a genuine organon for achieving a *rational life and society*." (LWM 52)

³⁷ A speculation: this is also obliquely indicated in the criticism of Morgenthau. For Nagel liberalism, of the sort represented by Mill, can take on board not just a more historicized understanding of social explanation/science, but also, romanticism's insights into human need and individuality. That is to say, against Morgenthau's "irresponsible romanticism" (explicitly indebted to Nietzsche), Nagel places a more responsible romanticism indebted to Mill (LWM 380).

Santayana remarks in one of his books that he would be ashamed to hold views in philosophy which he did not believe in daily life, and that he would deem it dishonest and cowardly to sail under colors in an argument which were not those under which he habitually lived. The precept implied by these comments can serve as a criterion for evaluating the quality of integration which a thinker achieves in his own life but more significantly, it helps to fix the subject matter and task of philosophy, and so to disclose the relevance of the philosophic pursuit to the society which nourishes it. It is a precept which I take for my own wholeheartedly, and one which I wish were taken as a guide in all philosophic inquiry. (LWM 39)

1935 was in the midst of the great depression. And so the question of nourishment was not merely a metaphor.³⁸ Nagel discerns a way in which existential concerns with integrity between thought and deed are connected to the social purposes of one's society. For Nagel, a philosopher's (what we may call) 'philosophical integrity' involves the way(s) in which one's professional arguments, professional credit, and public utterances and comportment cohere.

I do not mean to deny that there are tensions in Nagel's position. His views are, as we have seen, resolutely pluralist, and, if his "all philosophic inquiry" is not meant to refer to his own, he may be thought inconsistent with his other views here.³⁹ And he is a bit quick, too quick, to assume that the disclosure to society of the relevance of one's philosophical pursuit will be met by approval of that society. Even a democratic philosophy may irritate, even bore, the masses, after all. We should neither assume a kind of efficient market in ideas nor the automatic, effective uptake of useful ideas (see Lefevere and Schliesser 2014 and Schliesser 2019).

The hypothetical critic, who is friendly to Reisch's larger narrative about the retreat from political science by philosophy of science, can readily acknowledge that early Nagel would say the things I have just quoted. The crux of the matter is what happens when philosophers of science "have become" mere "specialists in our professional activities" (LWM 4).

As the reference reveals, Nagel understands and articulates unsparingly the perspective of the hypothetical critic at the start of a presidential address to the APA in

³⁸ As noted in Schliesser (2013), Nagel himself was about to embark on a funded tour of Europe where he would discover and partially help legislate a very different philosophical scene.

³⁹ There is clearly a limit to Nagel's pluralism that is partially set by his commitment to rigor and clarity. Unlike, say, Lippmann (Schliesser 2019), Nagel leaves very little space for the confused and those he suspects lack a liberal temper.

December 1954, where he discusses this feature of “recent analytical literature”. I quote two paragraphs from the (near) beginning of the lecture:

The past quarter century has been for philosophy in many parts of the world a period of acute self-questioning, engendered in no small measure by developments in scientific and logical thought, and in part no doubt by fundamental changes in the social order. In any event, there has come about a general loss of confidence in the competence of philosophy to provide by way of a distinctive intellectual method a basic ground-plan of the cosmos, or for that matter to contribute to knowledge of any primary subject-matter except by becoming a specialized positive science and subjecting itself to the discipline of empirical inquiry. Although the abysses of human ignorance are undeniably profound, it has also become apparent that ignorance, like actual knowledge, is of many special and heterogeneous things; and we have come to think, like the fox and unlike the hedgehog of whom Mr. Isaiah Berlin has recently reminded us, that there are a great many things which are already known or remain to be discovered, but that there is no one "big thing" which, if known, would make everything else coherent and unlock the mystery of creation. In consequence, many of us have ceased to emulate the great system-builders in the history of philosophy. In partial imitation of the strategy of modern science, and in the hope of achieving responsibly held conclusions about matters concerning which we could acquire genuine competence, we have tended to become specialists in our professional activities. We have come to direct our best energies to the resolution of limited problems and puzzles that emerge in the analysis of scientific and ordinary discourse, in the evaluation of claims to knowledge, in the interpretation and validation of ethical and esthetic judgments, and in the assessment of types of human experience. I hope I shall not be regarded as offensive in stating my impression that the majority of the best minds among us have turned away from the conception of the philosopher as the spectator of all time and existence, and have concentrated on restricted but manageable questions, with almost deliberate unconcern for the bearing of their often minute investigations upon an inclusive view of nature and man.

Some of us, I know, are distressed by the widespread scepticism of the traditional claims for a *philosophia perennis*, and have dismissed as utterly trivial most if not all the products of various current forms of analytical philosophy. I do not share this distress, nor do I think the dismissal is uniformly perspicacious and warranted. For in my judgment, the scepticism which many deplore is well-founded. Even though a fair-sized portion of recent analytical literature seems inconsequential also to me, analytical philosophy in our own day is the continuation of a major philosophic tradition, and can count substantial feats of clarification among its assets. Concentration on limited and determinate problems has yielded valuable fruits, not least in the form of an increased and refreshing sensitivity to the demands of responsible discourse. (LWM 3-5)

Nagel reminds us that the very best criticisms of analytic philosophy have often been stated within the tradition. More subtly, his idea that ignorance is not univocal strikes me as worthy of ongoing rediscovery. More pertinent here, Nagel grants de facto that philosophical professionalization and specialization in the intellectual division of labor necessarily involves generating the conditions of mental mutilation.⁴⁰

Now, Nagel's diagnoses of the source of professionalization is worth further reflection; for he thinks such bitter medicine worth our pain. He thinks that the professionalization has a number of causes (both internal to scientific development and due to social changes). But I leave most of these aside. Because the crucial claim for present purposes is this one: "in partial imitation of the strategy of modern science, and in the hope of achieving responsibly held conclusions about matters concerning which we could acquire genuine competence, we have tended to become specialists in our professional activities" (LWM 4).

The desire for professionalization is the desire for living up to the demands of responsible speech. And responsible speech here means something like 'being in the position of stating claims that have some or sufficient warrant.' (On warrant recall SR 56; see also SR 20.) And this, in turn, requires obtaining genuine competence of the sort associated with (and modeled on) scientific expertise. It is clear that in Nagel's own practice he was capable of being reasonably competent interlocuter to many special sciences (this is why I have commented on his engagement with economics),⁴¹ while still contributing to philosophy of science in a broad sense. To what degree the increasing esotericism of the special sciences allows this is a challenging question that goes beyond my present remit.⁴²

Nagel's stance on responsible speech is characteristic of analytic philosophy also in its more 'heroic' phase of the 1930s. Carnap's voluntarism, which is most majestically expressed in the free choice of a stipulative language, is, as Abe Stone (2006) has shown, an expression of our freedom to take "responsibility" for the choice of language, for own "self-legislation as a rational (i.e., speaking) being". That is, Carnap's theoretical philosophy is, in part, rooted in a practical concern. This Carnapian stance is accompanied, as Stone (2006, p.

⁴⁰ Adam Smith noticed the same phenomenon about the effects on the machine laborer.

⁴¹ For non-exhaustive overview, see Suppes (1994/2012).

⁴² In Nagel (1938, p. 46), Nagel makes this very point about formal logic: "In our own day formal logic, traditionally a part of philosophy, is becoming so specialized that in the near future perhaps only men with a thorough mathematical training will be capable of following its development." In larger context Nagel is exploring what might be subject matter for philosophers. (Sadly, he does not seem to be alert to his own gendered presuppositions here.)

232) emphasizes, by a second species of responsible speech: “outside the borders of theory [...] [speech] may be attempted in brief hints”. (Stone quoting the Foreword to the *Aufbau*).⁴³

That is to say, while Reisch is clear on the anti-metaphysical animus behind such statements (83), he misses a/the core strain in the self-understanding of (what became) analytic philosophy, namely responsible speech.⁴⁴ This understanding of responsible speech is itself ground in a moral and political conception of the possible fruits of philosophy.⁴⁵ Of course, on my view, that it is a core strain is itself the long-term effect of Nagel’s polemics gestured at the present essay and his philosophical politics (see also Schliesser 2013). It is important to see that this stance is not the effect of cold-war intimidation. That is, of course, compatible with the sociological argument that Reisch advances: that competitor views lost funding or were discouraged by effective forms of social sanction and intimidation. I do not mean to suggest that the professional status quo exists in virtue of its intellectual merits. Rather my point is that such merits exist in so far as one takes a liberal orientation seriously.

To be clear, in the previous paragraph I am claiming two things: first, that in the case of Nagel we do not have a “back to the icy slopes” account because the nature of his social engagement has been missed by Reisch. And, second, in the case of Nagel, this engagement has remained constant. Thus not all fellow travelers of logical empiricists were transformed, and so Reisch’s narrative is not comprehensive. Part of the problem here is that Nagel’s professionalism, which Reisch attributes in the case of logical empiricists to the intimidation caused by cold war, is, in fact, an expression of his view that responsible speech requires considerable specialized and expert knowledge. By making Nagel stand in for a *disciplinary* transformation—on which I have taken no stance—, Reisch misses that from Nagel’s individual perspective there was no transformation at all.⁴⁶

The embrace of responsible speech as a professional norm results from a moral and social vision of the utility and possible contributions of such a responsible philosophy of science. One of the fruits of such a responsible philosophy of science is, in fact, a kind of philosophical self-disciplining (“an increased and refreshing sensitivity to the demands of responsible discourse”). But as we see in the example with which I started—with Nagel contributing to the methodological debate in economics—this self-disciplining also provides

⁴³ A curious feature of Reisch’s book is the absence of Heidegger. This is presumably why the question of responsible speech is not salient for him.

⁴⁴ Concern over responsible speech also has a long history in liberal political theory; see Schliesser (2017).

⁴⁵ On the consequentialist justification of Carnap’s methodology, see especially Stein (1992).

⁴⁶ I thank Don Howard for helping me get clear on this.

the philosopher of science with *authority* to participate in, say, philosophical debates *within* the special sciences.

Now, the *apparent* effect of this self-disciplining is not just a focus on minutiae and a reliance on (let's stipulate) "dependable method of inquiry" (LWM 6), but also a retreat into "affirmations [...] meager in content" (LWM 7).⁴⁷ But this appearance is an expression of a form of self-command that resist ungrounded sweeping claims. But it is not a retreat from the tasks of a responsible philosophy of science articulated above. As Nagel puts it, "[w]hen ideals are handled *responsibly*, they therefore function as hypotheses for achieving a balanced exercise of human powers [...]. If moral problems can be resolved at all, they can resolved only in the light of specific human capacities, historical and acquired skills, and the opportunities (revealed by imagination disciplined by knowledge) for *altering the physical and social environment and for redirecting habitual behaviors*" (LWM 11; emphases added). I quote this passage because it shows that even when responding to hypothetical critic, Nagel's commitment to responsible speech and concomitant professional specialization remains wedded to the idea that one of the roles of philosophy science is to establish the fittingness of our ideals. In addition this focus on responsible (and warranted) speech is not a retreat into doing nothing, but it can play a role in non-trivial social change. As Nagel concludes, in virtue of the fact that our ideals and dispositions are the "products of society," logico-empirical philosophy of science—even the kind that seem to focus narrowly on the "methods of evaluating evidence"—helps, by promoting means for "achieving reliable knowledge," and recognizing its conditions, generate a naturalistic moral theory, which is "at the same time a critique of civilization, that is, a critique of the institutions that channel human energies, so as to exhibit the possibilities and limitations of various forms and arrangements of society for bringing satisfactions to individual human careers" (LWM 12; Nagel uses logico-empirical at LWM 13).

So, to be clear. Nobody would confuse Nagel's stance with the more revolutionary aspirations that animated left Vienna and unity of science movement originally. But even after the turn to professionalism it was animated by moral and political commitments that may entail non-trivial criticism of the status quo and advocacy for social change. Of course, it is pretty clear that Nagel thinks some changes may be gradual; and he recognizes that it is quite possible that human reason may not be able to remedy all social ills (LWM 17). In particular, he thinks that it is "impossible to decide responsibly, *antecedent* to inquiry, *which*

⁴⁷ Nagel is describing what he calls 'naturalism' here, but it is naturalism that is supposed to result from professional methods.

of the many human ills can be mitigated if not eradicated by extending the operations of scientific reason into human affairs” (LWM 17; emphases in original).

Now, there is a larger question to be pursued in how to think about what happens to professional philosophy of science once it is disassociated from Nagel’s vision. And one may well, then, be tempted by Reisch’s judgments about the discipline. But that goes beyond the present task of this chapter.

I conclude: I have tried to alert the reader to some of the weaknesses in Nagel’s meta-philosophy. I have not tried to evaluate its significance. For this must be judged, in part, by the epistemic and social fruits it has born. My sense is that Nagel’s philosophy can survive such scrutiny. All I have argued is, first, that Nagel’s position is neither (quietest) “despair” or (socialist) “foolish optimism” (LWM 17). Rather, second, Nagel articulated a philosophy of science that both *expresses* the egalitarian and pluralist commitments of a liberal society and is supposed to *advance* them. In so far as Nagel’s philosophy seems out of date, we should not discount the possibility that this is so because science and society have drifted toward inegalitarian and anti-liberal positions. For those of us who share in Nagel’s liberal aspirations, we must expect to construct a philosophy of science worth having anew in each generation.⁴⁸

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⁴⁸ I thank Don Howard, Trevor Pearce, and an anonymous referee, for feedback. I am very grateful to  Tuboly for his many helpful suggestions.

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