

Wittgenstein's Anti-scientistic Worldview

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A main source of our failure to understand is that we don't have an overview of the use of our words. – Our grammar is deficient in surveyability. A surveyable representation produces precisely that kind of understanding which consists in 'seeing connections'. ...

The concept of a surveyable representation is of fundamental significance for us. It characterizes the way we represent things, how we look at matters. (Is this a 'Weltanschauung'?)

Wittgenstein, *Philosophical Investigations* §122

This chapter outlines ways in which Wittgenstein's opposition to scientism is manifest in his later conception of philosophy and the negative attitude he held toward his times. The chapter tries to make clear how these two areas of Wittgenstein's thought are connected and reflect an anti-scientistic worldview he held, one intimated in the above passage.

It is argued that the later Wittgenstein's metaphilosophy is marked out against two scientific claims in particular. First, the view that the scientific method is superior to all other means of learning or gaining knowledge. Second, the view that scientific knowledge is superior to all other kinds of knowledge and understanding. Wittgenstein's opposition to these claims is brought out through examining a fundamental aim of his later philosophy, producing the 'kind of understanding which consists in "seeing connections"' (PI §122), and his attempts to expose certain philosophical confusions. It is argued that these reflect his anti-scientistic worldview.

Through discussion of Oswald Spengler's influence on Wittgenstein, the chapter outlines how Wittgenstein's opposition to scientism underwrites his negative cultural outlook and how this is connected with the anti-scientistic elements of his later philosophy discussed. The work of Ray Monk (1999; 1990) and Hans-Johann Glock (1996) is instrumental in what follows.¹

1 The understanding that 'consists in "seeing connections"'

The later Wittgenstein drew a firm distinction between philosophy and science. He held that philosophy is an entirely *a priori* discipline concerned only with dissolving philosophical problems. Philosophical problems are conceptual confusions brought about as a result of misunderstandings about the workings of language, particularly misunderstandings about the use of words. Wittgenstein's later method attempts to expose the conceptual confusions that generate philosophical problems. On this conception of philosophy, there is no place for the scientific method in philosophy because that is a methodology concerned with empirical matters; and since philosophical problems are conceptual confusions, empirical investigation cannot aid in their dissolution – their treatment must be *a priori*.² In philosophy, so conceived, there is no place for theory construction because there is nothing we need to theorize about.³ We don't need to discover

anything new; we just need to gain a clearer understanding of the workings of our language and concepts. ‘We want to *understand*’, Wittgenstein writes, in the first of the passages in the *Investigations* where he outlines his later conception of philosophy, ‘something that is already in plain view’. ‘For *this* is what we seem ... not to understand’ (PI §89).

These points are most clearly articulated in the following passage:

[O]ur considerations must not be scientific ones ... And we may not advance any kind of theory. There must not be anything hypothetical in our considerations ... [Philosophical problems] are ... not empirical problems; but they are solved through an insight into the workings of our language, and that in such a way that these workings are recognized – *despite* an urge to misunderstand them. The problems are solved, not by coming up with new discoveries, but by assembling what we have long been familiar with. Philosophy is a struggle against the bewitchment of our understanding by the resources of our language. (PI §109)

Our ‘considerations must not be scientific’ because philosophical problems are ‘not empirical problems’: they are conceptual confusions generated by misunderstandings about language, which can be ‘solved through an insight into the workings of our language’. We cannot ‘advance any kind of theory’ – be it to propound, endorse, or seek to refute or repudiate a theory, where a ‘theory’ is a system of ideas intended to explain something, always open to falsification or support by discoveries – because in philosophy we’re not in the process of making such discoveries. We have all the information we need; we just need to understand it better. We don’t need to ‘hunt out new facts’ – indeed, according to Wittgenstein, in philosophy we cannot learn anything *new*, a point he emphasizes: ‘it is essential to our investigation that we do not seek to learn anything *new* by it’ (PI §89). Philosophical ‘problems are solved, not by coming up with new discoveries, but by assembling what we have long been familiar with’ – that is, the language we use and the concepts we employ.

The later Wittgenstein argued that a major source of philosophical confusion is the lack of a clear view of the workings of language, which leaves us prone to the misunderstandings that generate conceptual confusions (PI §122). Features of language such as misleading similarities in ‘surface grammar’ (*Oberflächengrammatik*) mask the differences between words and their usages.⁴ They hide differences in the underlying structure of language, what Wittgenstein calls ‘depth grammar’ (*Tiefengrammatik*; PI §664; cf. PI §§4, 10-14, 21-22). This is one of the main features of language that motivates Wittgenstein’s claim that ‘Our grammar is deficient in surveyability’ (*Übersichtlichkeit*). We lack what he calls an ‘overview’ (*Übersicht*) of the use of words:

A main source of our failure to understand is that we don’t have *an overview* of the use of our words. – Our grammar is deficient in surveyability. (PI §122)

Misleading features of language and the lack of an overview can generate philosophical confusion. An overview is a ‘perspicuous’ or ‘surveyable representation’ (*übersichtliche Darstellung*) of grammar, relative to the language games involved in a particular philosophical problem. An overview can provide a map of the workings of language and the conceptual terrain in which

conceptual confusions are generated, to help people avoid the ‘traps’ in language that lead to such confusions (CV [R] 25; *cf.* BT 311-3, PI §§123, 203).

Wittgenstein’s attempts to make clear the use of words with respect to a philosophical problems aim to provide overviews of grammar. For example, in his treatment of the private language argument (PI §§243-315), Wittgenstein offers a surveyable representation of the language games we use to ascribe sensations to human beings, in order to try to dissolve the problem of other minds, amongst other issues he addresses.⁵ In philosophy so conceived, what we engage in is ‘grammatical investigation’ (*cf.* PI §109).

On this conception of philosophy, philosophy yields not new knowledge, but a type of *understanding*: the ‘kind of understanding which consists in “seeing connections”’:

A surveyable representation produces precisely that kind of understanding which consists in ‘seeing connections’. (PI §122)

Connections, that is, between concepts – connections that mark out the roles of and connections between words in language games (or the lack of such connections). An overview aims to provide this kind of understanding in order to dissolve or prevent conceptual confusion.

This methodological idea holds that we can learn something without ‘coming up with new discoveries, but by assembling what we have long been familiar with’ in a way that makes the conceptual connections (or lack of them) clear (PI §109). This is not gained through the scientific method, nor does it involve gaining any new knowledge about the world or constructing any theories. The end result is not an increase in knowledge, but clarity about the workings of our language and conceptual repertoire, in order to dissolve confusion generated by a lack of such clarity. The contrast can be drawn on a fundamental epistemological level: science yields *knowledge*, philosophy doesn’t – philosophy yields *understanding*. Or: if we want to say that philosophy yields knowledge, it’s not knowledge of new facts and information about the world, but knowledge of the way our concepts work and interrelate.⁶ To the extent that philosophy yields knowledge, it yields a kind of know-*how*: knowledge of how to dissolve philosophical problems and avoid getting into the confusions that generate them (*cf.* Glock 1996, 283).

A useful way of capturing this distinction is offered by Ray Monk, who emphasizes the role of the understanding that consists in seeing connections in Wittgenstein’s later philosophy. In an article on Wittgenstein’s anti-scientism, Monk distinguishes between scientific and philosophical understanding in terms of *theoretical* and *non-theoretical* forms of understanding (Monk 1999, 66).⁷ Scientific understanding is theoretical: it’s brought about by the construction and testing of hypotheses and theories; it’s always subject to change through developments in theories brought about by advancements made through ongoing discoveries; it involves gaining new knowledge about the world. Philosophical understanding, by contrast, is *non-theoretical*: it’s not based on hypotheses or theories; the process of dissolving conceptual confusion is not a matter of hypothesizing or theory construction. We’re not engaged in a process of learning new information about the world; we’re engaged in a process of gaining clarity about language and concepts in order to dissolve philosophical confusion. Philosophy, so conceived, cannot be construed as anything like a recognizably scientific enterprise.

This is not to say that philosophy and science cannot work together. As P.M.S. Hacker argues, Wittgenstein gives philosophy warrant to interfere in the sciences (Hacker 2007a, 23). Scientific discoveries and theories often involve new concepts and conceptual change, which often result in the coinage of new words and new uses for words. This is usually harmless. But sometimes it brings about conceptual confusion. This is where the philosopher has a distinctive role. Wittgenstein, Hacker writes, gives ‘philosophy *a license* to criticize scientists’, for he ‘showed *why* philosophy has a *right* to interfere with empirical sciences – for its role is as a *conceptual critic*’ (Hacker 2007a, 23).⁸ That role is important, for conceptual confusion can be pernicious and endemic. And, as I will argue later, sometimes such conceptual confusion is the result of scientism.

2 Wittgenstein’s morphological methodology

Wittgenstein’s view that philosophy yields this kind of understanding and his method of providing an ‘overview’ in order to engender it are perhaps the most fundamental anti-scientistic elements of his philosophy. Hans-Johann Glock writes that ‘Wittgenstein thought of this methodological idea as a world-view competing with the scientific one’ (Glock 1996, 279). That Wittgenstein thought of it in this way is suggested at the end of PI §122:

The concept of a surveyable representation is of fundamental significance for us. It characterizes the way we represent things, how we look at matters. (Is this a ‘*Weltanschauung*’?)

This methodological idea is developed from two important influences, Johann Wolfgang von Goethe (1749-1832) and the historian and cultural critic Oswald Spengler (1880-1936). Glock writes that Wittgenstein shares with Goethe and Spengler the following two convictions: first, that ‘there are forms of understanding other than the causal explanation of the ... sciences’, and second, that ‘one can shed light on a diverse multitude of phenomena without discovering anything new, by arranging what is already known in a way which clarifies the links or interconnections’ (Glock 1996, 279).

If Glock’s analysis is correct, what he calls the ‘scientific worldview’ against which Wittgenstein marks out his own worldview can be characterized by two claims. First, that *scientific understanding is the only kind of understanding there is*. Second, *in order to learn something about phenomena we need to make new discoveries*. Both of these claims are epistemological; the second is also methodological. The main epistemological claim scientism makes is that all genuine knowledge must either be scientific or at least be reducible to scientific knowledge, or that scientific knowledge is much more important than other kinds of knowledge. The central methodological claim scientism makes is that the scientific method is the only way to gain knowledge, or that it is the only proper method of inquiry, or that it is much more important than other methods of inquiry.

These epistemological and methodological claims are standard ways of defining scientism, in both academic and popular sources. On the methodological claim, take for example the following definition by Simon Blackburn, in the *Oxford Dictionary of Philosophy*:

Pejorative term for the belief that the methods of natural science, or the categories and things recognized in natural science, form the only proper elements in any philosophical or other inquiry. (Blackburn 1994, 344)

Other definitions involve the epistemological claim in addition to the methodological claim.⁹ For example, John James Wellmuth's definition in his book *The Nature and Origins of Scientism*:

[T]he belief that science ... and the scientific method ... afford the only reliable natural means of acquiring such knowledge as may be available about whatever is real. (Wellmuth 1944, 1-2)

The following definition from the *OED* also involves both the methodological and epistemological claims:

A term applied (frequently in a derogatory manner) to a belief in the omnipotence of scientific knowledge and techniques; also to the view that the methods of study appropriate to physical science can replace those used in other fields such as philosophy and, especially, human behaviour and the social sciences. (*OED*)

Wittgenstein's later philosophy is marked out in opposition to both the methodological and epistemological claims. It is marked out against the idea that scientific understanding is *exclusive*: that there is only *one* way of learning, understanding or gaining knowledge, that of the sciences. This idea could be manifest in various ways: in the broad claim that scientific understanding is the only kind of understanding there is, or in a more specific claim such as scientific understanding is the only rational, legitimate or effective form of understanding, or that it is the only kind of understanding that merits the title 'knowledge'. The later Wittgenstein argued that we could learn things about our concepts of mind, human nature, causation, consciousness, rationality, free will, aesthetic experience, etc. *a priori*, through providing an overview of the conceptual framework of the phenomena in question in order to represent them perspicuously.¹⁰ Such a method of addressing philosophical problems does not involve making any new discoveries, nor does it involve any theory construction. Yet, if Wittgenstein is correct, we learn something: we learn about the workings of language and about the conceptual structure of, and any philosophical problems concerning, the phenomena in question, and how to solve such problems.

These definitions illustrate that Wittgenstein is opposed to straightforward forms of scientism. If Glock's analysis is correct, Wittgenstein's worldview can be understood as anti-scientistic in that it is marked out in opposition to a worldview that endorses these epistemological and methodological scientistic claims. If we are to understand the worldview against which Wittgenstein marks out his *übersehen*-world-view as fundamentally characterized by the two features Glock identifies, then it seems that the worldview against which Wittgenstein marks out his own can be understood as quite straightforwardly scientistic.

To understand why Wittgenstein's methodological idea of an overview is constitutive of a worldview and why it is opposed to a scientistic worldview it helps to look at the ways in which Spengler and Goethe influence this idea. I will focus on Spengler because he seems to be the greater

of the two influences and because he also exerted a considerable influence on Wittgenstein's negative cultural outlook.¹¹

In his bestselling book *The Decline of the West* (*Der Untergang des Abendlandes*, 1918), Spengler rejects the idea that the role of the historian is simply to gather historical facts and offer explanations on their basis. This was because Spengler rejected the idea that history could be understood simply in terms of a series of laws, such as causal laws (*cf.* Spengler 1918, 49). Spengler instead proposes a 'physiognomic' conception of world history, whereby the historian understands historical events and eras not merely in terms of laws, but more importantly in terms of the morphological relations between them, such as analogies between important historical eras, events and figures.¹² For example, to understand Napoleon and his place in history, Spengler argued that we need to look at analogies between Napoleon's life and the lives of other great leaders, such as Julius Caesar and Alexander the Great. Such comparison must be procedural: in the example just given, the first comparison is 'morphologically quite unacceptable', while the second is 'correct'. Similarly, to understand Renaissance Florence we need to look at its morphological relations with Ancient Athens; to understand Jesus Christ we need to compare his life with that of Siddhartha Gautama, and so on (Spengler 1918, 4). Spengler cites Goethe as a key influence on this idea.¹³ Goethe founded the field of 'morphology' and coined the term as it is used to denote the science of the forms of living organisms and their structures, which aims to find underlying unities across diverse varieties of plants and animals.¹⁴

In the case of Spengler, seeing connections (analogies) between historical events brings about historical understanding. In Wittgenstein's case, seeing connections (or the lack of them) between words, concepts, language games and their roles in human life brings about philosophical understanding. The methodological idea Wittgenstein develops from Spengler (and Goethe) conceives of a type of understanding that can be gained *a priori* by observing morphological connections between concepts. For example, seeing family resemblances between concepts is a means of identifying a commonality that unifies concepts, yet this cannot be simply spelled out in terms of necessary or sufficient conditions that relate them. Or seeing connections between words and their usages, and their roles in language games and in the 'forms of life' we inhabit, and the lack of such connections often present in philosophical problems. Identifying such relations doesn't involve making any empirical discoveries, gaining any new knowledge of new information, or constructing any theories; it involves gaining clarity through taking a new view on things: 'it characterizes the way we represent things, how we look at matters' (PI §122; *cf.* Monk 1990, 302-303).

3 Wittgenstein's disdain for the *Zeitgeist*

Spengler also exerted a strong influence on Wittgenstein's negative appraisal of the *Zeitgeist*. Wittgenstein held a vehemently negative attitude towards his times. G. H. von Wright recalls that Wittgenstein's attitude was 'one of censure and even disgust' (Wright 1982, 110). Wittgenstein even felt that 'culture' was too high a title for the age, thinking 'civilization' a more fitting label (CV [R] 73; *cf.* 8). The distinction between 'culture' and 'civilization', and the description of our present age as the latter he inherited from Spengler, who puts forward this distinction in *The*

Decline of the West. Central to that book was an organic conception of the stages in the life of a culture, which both underwrote Spengler's pessimism and influenced Wittgenstein's cultural outlook. A culture, according to Spengler, has a definite lifespan organised into various stages, the final of which is civilization – 'the inevitable *destiny*' of any culture (Spengler 1918, 31).¹⁵ In this stage, a culture has degenerated from its peak stage of 'higher culture' to a stage where it ceases to any longer be creative. As its life and energy is spent, it descends into inactivity and inertia according to what Spengler held was the fixed teleology of historical and cultural growth. The transformation of a culture into civilization is therefore degenerative and is the result of inevitable historical processes.

Spengler developed his account of the life of cultures by taking a morphological approach towards the history and evolution of cultures, which thereby offered a non-scientific means of understanding the roots of modern culture. In *The Decline of the West*, the employment of a non-scientific form of understanding is part of both the diagnosis and the cure of our problems (although Spengler is not so optimistic as to talk about cures or solutions to the problems he identifies). Spengler's principal influence on Wittgenstein's cultural outlook lay in his diagnosis of the early twentieth century as the final stage of what they perceived as a once-vibrant Western culture. Wittgenstein took from Spengler the conviction that the time in which they lived was Western culture's nadir – its increasingly obvious decline into the state of inevitable senescence Spengler dubbed 'civilization'.¹⁶

Spengler's influence is particularly evident in some of Wittgenstein's remarks on culture, such as the following, from late in Wittgenstein's life:

Perhaps one day a culture will arise out of this civilization.

Then there will be a real history of the discoveries of the 18th, 19th & 20th centuries, which will be of profound interest. (CV [R] 73)

Incidentally, this remark, from 1947, occurs alongside some of Wittgenstein's most salient remarks on scientism. Particularly telling are a set of remarks dated 13-14 April 1947 (CV [R] 69-71). Therein Wittgenstein expresses concern with the 'over-estimation of science' (CV [R] 70).¹⁷ He also writes:

Science: enrichment & impoverishment. The *one* method elbows all others aside. Compared with this they all seem paltry, preliminary stages at best. You must climb down to the sources to see them all side by side, the disregarded & the preferred. (CV [R] 69)

Here Wittgenstein expresses his concern with a claim to which he was strongly opposed and which is a straightforward way of defining scientism: the idea that science, or the scientific method, is superior to all other modes of inquiry.¹⁸ 'Overestimating science' is a straightforward way of defining scientism. Tom Sorell, for example, in one of the few monograph studies of scientism, defines scientism as 'the belief that science, especially natural science, is much the most valuable part of human learning – much the most valuable part because it is much the most authoritative, or serious, or beneficial' (Sorell 1991, 1; see also x). Scientism, thus understood, is ultimately a

matter of *overvaluing* science. Wittgenstein's concern in these remarks is a straightforward way of understanding scientism.

Wittgenstein's worry about science 'elbowing aside' other forms of inquiry remark is telling of a shared worry by Spengler and Wittgenstein, which illustrates a connection between their shared cultural outlooks and their anti-scientism. Central among the things Spengler thought were lost when a culture becomes a civilization is an appreciation of art and religion. The sixth and seventh chapters of *The Decline of the West* identify art and music as both the symbols and accomplishments of a 'higher form' of culture, the distillations of the energy and vitality of a whole way of life concentrated into majestic forms that express the spirit of that culture. According to Spengler, the degradation into a civilization is marked by two related losses: first, a loss of capacity to produce these symbols and expressions; second, a loss of appreciation of art and music – their dismissal, for instance, as mere sources of entertainment or subjective pleasure. One way Spengler argued that these two losses are evident in modern civilization is in the *vereneration of science*: only the products and accomplishments of science matter, for only they express what *really* matters – theoretical knowledge, say, rather than the potent spirit of a people (*cf.* Spengler 1918, 177-8; 424).

We see a similar worry expressed in Wittgenstein's remark above, that the veneration of science 'elbows aside' other methods of inquiry and ways of thinking, for example, by seeing them as less important. And like Spengler, amongst the methods and ways of thinking Wittgenstein thought were being increasingly elbowed aside in his time were those of the arts. For Spengler and Wittgenstein, scientism drives out other aspects of a culture, either by dominating our way of life, or by assimilating the other areas.

We see these worries expressed when Wittgenstein writes, in 1939-40:

People nowadays think that scientists are there to instruct them, poets, musicians, etc. to entertain them. *That the latter have something to teach them* never occurs to them (CV [R] 42)

Wittgenstein complains here that people nowadays do not see the arts as didactic, but merely as forms of entertainment. This follows Spengler, who held that one of the consequences of the twentieth century's demise from culture to civilization was a loss of appreciation for art and music, resulting in their dismissal as mere sources of entertainment or pleasure.

Given Wittgenstein's view on the kind of understanding he thought philosophy could engender, seeing the arts as non-didactic could have pernicious effects for how philosophy is understood. Monk argues that Wittgenstein saw the non-theoretical understanding involved in philosophy to be more akin to the kinds of understanding involved in the arts than the sciences. What Monk describes as 'non-theoretical understanding' is the kind 'we have when we say we understand a poem, a piece of music, a person or even a sentence' (Monk 1999, 66). The understanding involved in any of these is non-theoretical because we don't require a theory to understand them.¹⁹ Contrast this with the theoretical understanding required in science, where we need to construct theories in order to understand empirical phenomena or processes. In philosophy, as the later Wittgenstein conceived of it, we don't need a theory to understand or make headway in solving philosophical problems; we just need greater clarity about the nature of

those problems and the concepts and language involved in them, which, he argued, would make them disappear.

In philosophy and the arts we of course learn things, but what we learn are not new pieces of knowledge; rather, we develop or acquire a kind of understanding. If we see all knowledge and understanding as scientific in kind, or as the only legitimate form of knowledge or understanding, we cannot see philosophy and the arts as didactic. And if we see this type of understanding as impoverished compared to scientific knowledge and understanding we privilege scientific ways of thinking over some or perhaps all non-scientific kinds. These are symptoms of scientism.²⁰ These are also other straightforward ways of defining scientism, as we saw earlier.

Related to Spengler's diagnosis of the cultural period in which he and Wittgenstein lived seems to be Wittgenstein's deep pessimism about being understood and achieving his aims as a philosopher. Some remarks suggest that he even feared he would *never* be understood. Von Wright recalls that Wittgenstein 'was of the opinion ... that his ideas were usually misunderstood and distorted even by those who professed to be his disciples' and 'doubted that he would be better understood in the future' (Wright 1954, 3). This pessimism is most famously expressed in the preface to the *Investigations*, where Wittgenstein declares that it's unlikely even one person will understand his ideas given the 'darkness of this time' ('It is not impossible ... but, of course, it is not likely'; PI p. 4). But Wittgenstein may have felt that one day there would be a cultural environment in which his ideas would stand a better chance of being understood. Towards the end of his life, in conversation with his close friend and former student Maurice O'C. Drury, Wittgenstein said,

My type of thinking is not wanted in this present age, I have to swim so strongly against the tide. Perhaps in a hundred years people will want what I am writing.²¹

The hope of this possibility might have derived from his Spenglerian view on the life of a culture: that in a hundred years Western culture's period of civilization would have passed and a new culture would have emerged in which his work could 'bring light into one brain or another', or where a 'real history' of the preceding centuries could emerge (PI p. 4; CV [R] 73).

Monk argues that the 'emphasis on *seeing* connections links Wittgenstein's philosophy with Spengler's *Decline of the West*, and provides the key to understanding the connection between his cultural pessimism and the themes of his later work' (Monk 1990, 302). The methodological influence Spengler exerted on Wittgenstein, and the connection between Wittgenstein's later work and his cultural outlook lies in the influence Spengler exerted on Wittgenstein. These two areas of Wittgenstein's thought are connected by Wittgenstein's anti-scientism in the respects discussed above. It seems that these are not merely connected by anti-scientistic views, but reflect something deeper: an anti-scientistic *worldview* which underpins Wittgenstein's later conception of philosophy, his cultural outlook and his pessimism about being understood. Wittgenstein's negative appraisal of the *Zeitgeist* wasn't merely one of cultural preferences (although that is an important aspect of it); it also has a substantive basis, in that it is tied in with fundamental tenets of his later thought and reflects the anti-scientism that underwrites his whole worldview.

4 Scientism and philosophical confusion

Scientism takes many forms, some of which we've seen in the definitions discussed above.²² Originally 'scientism' wasn't pejorative. Coined in roughly the mid-nineteenth century, the term acquired a pejorative use in the early twentieth century, something to the effect of 'excessive belief in the power of science'.²³ It gained a negative connotation largely as a result of reactions against attempts to apply the methods of the natural sciences to other disciplines, with some seeing this as overly ambitious and perceiving dangers such as the possibility of certain disciplines being seen as obsolete or impoverished by comparison with science (*cf.* Haack 2009, 2-3). The great success of the natural sciences in explaining phenomena and the attempt to extend their methods to other domains with the expectation that such success might be enjoyed elsewhere is what has led to many accusations of scientism. One way in which this was manifested in the early days of the term (the late nineteenth and early twentieth century) was in attempts by some practitioners of non-scientific disciplines (especially those sciences not classified within the natural sciences) to imitate the natural sciences in their fields, for example by imitating their teaching and vocabulary.

In the first of a seminal set of papers on scientism, some of the earliest research on the theme, the economist Friedrich von Hayek (1889-1992), Wittgenstein's second cousin,²⁴ offers an account of scientism and traces its historical roots.²⁵ Hayek treats the attempt to imitate the natural sciences in other fields as definitive of scientism: 'we shall', he wrote, 'wherever we are concerned, not with the general spirit of disinterested inquiry but with that slavish imitation of the method and language of Science, speak of "scientism" or the "scientistic" prejudice' (Hayek 1942, 269).²⁶ Here we find one of the first explicit definitions of scientism as a pejorative, for Hayek defines it as a form of prejudice.

'Imitating the natural sciences' captures an important part of the attitude to which Wittgenstein was opposed in his opposition to the view that the scientific method can be applied in non-scientific domains, such as philosophy. The idea that certain disciplines are obsolete or impoverished by comparison with science – a prejudice that led to imitations of science, in reaction to which 'scientism' gained its pejorative connotation – clearly troubled Wittgenstein, as one of the remarks quoted earlier suggests, where Wittgenstein talks about how science can not only enrich but can also impoverish, in the case of the latter, by 'elbowing aside' all other methods of inquiry and learning.

The definition of scientism as 'imitating the natural sciences' helps to identify another commonality between Wittgenstein and Spengler. Spengler's conception of historical methodology is primarily opposed to what he calls a "pragmatic" handling of history: understanding and arranging historical events 'as they become visible day by day on the surface, at their face value, and arranging them on a scheme of "causes" or "effects"'. 'Such a "pragmatic" handling of history would', Spengler writes, 'be nothing but a piece of "natural science" in disguise' (Spengler 1918, 6; see also Monk 1990, 302). Wittgenstein's opposition to the imitation of the scientific method in philosophy is opposed to treating philosophy as natural science in disguise. Wittgenstein held that approaching philosophy in this way betrays the kind of 'slavish imitation of the method of science' for which Hayek criticizes scientism, the same kind of problem for which Spengler attacks certain conceptions of historical methodology.

What makes Wittgenstein's opposition to scientism unique is that he thought that such imitation led to philosophical confusion. These worries were perhaps most clearly expressed in the *Blue Book* in 1933:

Our craving for generality has another main source: our preoccupation with the method of science. ... Philosophers constantly see the method of science before their eyes, and are irresistibly tempted to ask and answer questions in the way science does. This tendency is the real source of metaphysics, and leads the philosopher into complete darkness. I want to say here that it can never be our job to reduce anything to anything, or to explain anything. Philosophy really is "purely descriptive". (BB 18)

As in PI §109, here we see that the later Wittgenstein's conception of philosophy is directly tied in with his demarcation of philosophy from science, primarily because he held that misconceptions of philosophy's methodology as being in some respects scientific causes confusion. As we've seen, Wittgenstein was opposed to the idea that there is only *one* method of understanding and acquiring knowledge, that of science, and that this way should be pursued in philosophy, because that tendency, he thought, leads the 'philosopher into complete darkness'. A methodological confusion Wittgenstein attacked in his later work, intimated in this passage, is the tendency to treat philosophical matters as scientific ones – a 'preoccupation with the method of science' when we're doing philosophy. For example, to treat philosophical problems as partly or entirely scientific in kind, by trying to solve philosophical problems by constructing theories, which, by the very nature of a 'theory', will always be open to corroboration or falsification. But if the later Wittgenstein's diagnosis of the nature of philosophical problems is correct, the very idea that we need a theory is itself the product of confusion – confusion about the nature of philosophical problems.

Wittgenstein thought this methodological confusion was endemic in philosophy and the source of much confusion. As is clear from the passage quoted above, he thought it was most pervasive in metaphysics. He thought that metaphysics was the area of philosophy that most blurred the distinction between conceptual and empirical investigations, as he makes clear in *Zettel*:

Philosophical investigations: conceptual investigations. The essential thing about metaphysics: it obliterates the distinction between factual and conceptual investigations. (Z §452)

The distinction between these two types of investigation is central in Wittgenstein's later philosophy and is one that he thought, if blurred, could cause the kind of methodological confusion just discussed, by seeing philosophical problems as problems amenable to scientific investigation.²⁷ This source of confusion is traceable to a tendency the later Wittgenstein sought to expose: an 'irresistible temptation' to 'ask and answer questions in the way science does'. This 'irresistible temptation' is something with which Wittgenstein is concerned in PI §109, where he writes of our 'urge to misunderstand' philosophical problems.

The view Wittgenstein sought to expose as confused might be best understood as what we might call a 'scientistic misleading picture'. There are other misleading pictures Wittgenstein tried to expose as scientistic. Warren Goldfarb, for example, in an article on Wittgenstein's anti-

scientism in the philosophy of mind, identifies in Wittgenstein's later philosophy of mind an attempt to expose a scientific picture underlying certain conceptions of mental phenomena.²⁸ That picture assumes the truth of what Wittgenstein calls 'psychophysical parallelism' (Z §611): the doctrine that there are specific states or processes that *constitute* mental notions such as understanding, believing, intending and so on. It is also driven by an assumption that mental states and processes can be fully examined by neurophysiology and cashed out in neurophysiological terms – e.g. that a mental 'state' can be pinpointed, examined and entirely explained in terms of a particular state of the brain. The scientific picture is manifested, Goldfarb argues, in the assumption that there *must* be some underlying state or process behind mental notions such as understanding.²⁹ The kind of position or attitude Wittgenstein attacks in his arguments against psychophysical parallelism would be, for example, the dogmatic assumption of the truth of the mind-brain identity theory.

The picture Goldfarb identifies could be underpinned by a wider scientific methodological confusion Wittgenstein sought to expose. Goldfarb defines scientism, in the context of Wittgenstein's attack on the picture of mental states and processes, as 'the smug and unexamined assurance that what wants explanation is obvious, and that scientific tools are immediately applicable' (Goldfarb 1992, 112). The assumption that scientific tools are applicable to an area of inquiry such as philosophical is primarily that to which Wittgenstein is opposed to in his hostility towards the view, or assumption, that philosophy's methodology is partly or entirely scientific. This can perhaps be understood as part of a scientific misleading picture he tried to expose in his later philosophy, one that was both a product and source of confusion. Someone held captive by a scientific methodological picture might assume that scientific methods have application in non-scientific domains. Exposing this type of confusion was an important aim in Wittgenstein's later work, not only in his metaphilosophy but also in other areas, such as his philosophy of religion.³⁰

Misleading pictures can develop into or underlie entire worldviews. Wittgenstein thought, for example, that the Augustinian picture of language could develop into 'a whole *Weltanschauung* encompassing language, the mind and the world' (Baker and Hacker 1983, 13). Pictures about language are preconceptions about language (Hacker 2007b, 107). Similarly, the scientific methodological picture Wittgenstein attacked can sometimes be understood as a preconception about the nature of science and of philosophy: a preconception about the domains where the scientific method can be applied and about the nature of philosophical problems.

If misleading pictures can develop into worldviews, and if the scientific attitude to which Wittgenstein is opposed can be understood as the manifestation of a misleading picture, then perhaps the scientific worldview against which Wittgenstein marks out his own is best understood as what Wittgenstein perceived as a misleading picture. If that is so, then we can understand a central aim of Wittgenstein's later work, in attacking what he saw as a confused view of the nature of philosophy as in some respects scientific, to have been to expose the erroneousness and perniciousness of this scientific picture. If that is correct, we can understand the later Wittgenstein's worldview as opposed to what he perceived as a confused worldview, confused insofar as he perceived it as scientific. Scientism, understood in the way discussed in this chapter, taking a form involving certain epistemological and methodological claims, can be manifest as a misleading picture Wittgenstein tried to expose, one that could develop into a worldview. And

Wittgenstein's worldview was marked out in opposition to such a worldview. Therefore, the later Wittgenstein's worldview was anti-scientistic.

Concluding remarks

The arguments of this chapter can be broken down into three claims. First, that Wittgenstein's anti-scientism plays an important role in his later conception of philosophy. In support of this it was argued that the drive behind Wittgenstein's later conception of philosophy can be understood as anti-scientistic. This was illustrated through discussion of a central aim of Wittgenstein's later philosophy, that of bringing about the kind of understanding that consists in 'seeing connections'. Examination of this idea, the associated notion of an 'overview' and Wittgenstein's later philosophical method bring out anti-scientistic elements of his metaphilosophy. It was argued that the features or kinds of scientism Wittgenstein targets are primarily best understood as epistemological and methodological. In support of the claim that Wittgenstein targets forms of scientism, we saw that these epistemological and methodological features are often treated as part of the definition of 'scientism'. This first claim was also supported by looking at the later Wittgenstein's attempts to expose scientism as source of philosophical confusion. It was argued that the scientistic worldview against which Wittgenstein marks out his own can be understood as a misleading picture Wittgenstein tried to expose, one that endorses the epistemological and methodological claims to which Wittgenstein was opposed.

Second, that Wittgenstein's anti-scientism plays an important role in his negative cultural outlook. This was supported by tracing the origins of Wittgenstein's cultural outlook in Spengler, who also exerted an important influence on Wittgenstein's later conception of philosophy. In addition to inheriting the idea that there is an important form of understanding other than that brought about by scientific inquiry, in Spengler Wittgenstein finds a statement of his own cultural attitude housed within a theory of why early twentieth century culture was the way it was.

Spengler's influence serves to support the third claim, that Wittgenstein's anti-scientism provides a means of understanding the relation between these two areas of his thought. If Monk is correct that Wittgenstein's emphasis on seeing connections links his cultural outlook with his later conception of philosophy, and if the role of anti-scientism in Wittgenstein's later conception of philosophy and his cultural outlook adumbrated in this chapter are correct, then we can understand the link between these two in terms of Wittgenstein's hostility towards scientism. If Glock is correct that Wittgenstein marks out his own worldview in opposition to a scientistic worldview, the relation between these two areas of Wittgenstein's thought reflects an anti-scientistic worldview Wittgenstein held, one intimated in PI §122.³¹

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¹ This chapter focuses on the later Wittgenstein, but this is not to suggest that there are not only anti-scientistic but also *scientistic* ideas in his earlier work. The early Wittgenstein's identification of all meaningful propositions with the language of science is arguably scientistic (see TLP 4.11), as was the form of verificationism he propounded and endorsed between 1929-30 (see WVC 47; 79; 97; 100-1; 159; 210-11; 227; 245). A remark from 1947 suggests that Wittgenstein saw his earlier theories of meaning as scientistic: 'why am I so anxious to keep apart ... ways of using "declarative sentences"? ... It is simply an attempt to see that every usage gets its due. Perhaps then a reaction against the over-estimation of science. The use of the word "science" for "everything that can be said without nonsense" already betrays this over-estimation. For this amounts ... to dividing utterances into two classes: good & bad; & the danger is already there' (CV [R] 70). On anti-scientism in the *Tractatus*, see Chon Tejedor's paper in this volume (Tejedor 2017).

² Since my purposes are exegetical, I will not critically assess this claim. It is worth noting though that even if we accept the later Wittgenstein's metaphilosophy there might still be a place for science in the dissolution of philosophical problems. See for example James C. Klagge's argument that there are cases where scientific discoveries can aid conceptual clarification. See Klagge 2011, ch. 7 and for a useful summary of this objection, see DeAngelis 2012.

³ Paul Horwich argues that the later Wittgenstein's metaphilosophy is directly opposed to scientism in its opposition to theory construction in philosophy, which, Horwich argues, is the central feature of Wittgenstein's later philosophy. See his recent book *Wittgenstein's Metaphilosophy* (Oxford: Clarendon Press, 2012).

⁴ Wittgenstein repeatedly warns of the misleading nature of surface grammar in his later work – the 'power language has to make everything look the same' (CV [R] 19). He claimed that the focus on surface grammar at the expense of failing to pay sufficient attention to depth grammar was 'the main mistake' made by philosophers of his generation (LC 2). For an analysis of that remark, see Goldstein 1994. In *Zettel* he compares this mistake – which he claims is also made by psychologists – to classifying 'clouds by their shape' (Z §462). This seems a bad analogy given that clouds *are* classified by their shape, along with their distance from the ground.

⁵ For a clear account of this see Schroeder 2006, 201-19.

⁶ For a clear account of this idea see P.M.S. Hacker, 'Philosophy: A contribution, not to human knowledge, but to human understanding' (*Royal Institute of Philosophy Supplement*, Volume 65, October 2009, 129-153).

⁷ 'Wittgenstein and the Two Cultures', *Prospect Magazine*, July 1999, 66-67; available online under the title 'Wittgenstein's Forgotten Lesson' (20 July 1999): <<http://www.prospectmagazine.co.uk/magazine/ray-monk-wittgenstein/#.UrGuo42zccs>>.

⁸ Hacker is the most prominent example of a philosopher who has tried to show how a Wittgensteinian method can be used to expose conceptual confusions in or as a result of science (or scientism). Hacker has tried to show that various areas of contemporary science, particularly neuroscience, generate conceptual confusions. See for example his book co-authored with M.R. Bennett, *Philosophical Foundations of Neuroscience* (Oxford: Blackwell, 2003). See also Goldfarb 1992 and 1989, which I will discuss later.

⁹ In addition to those discussed, see also Longino 2011; de Gaynesford 2006, 12; Ryder 2005; Bullock and Trombley 1999, 775.

¹⁰ For accounts of Wittgenstein's criticisms of scientific approaches to philosophy of mind and aesthetics, see William Child's and Severin Schroeder's respective chapters in this volume (Child 2017; Schroeder 2017).

¹¹ In a remark from 1931, Wittgenstein listed Spengler as one of his main influences, alongside nine other thinkers including Frege and Russell (CV [R] 16). Originally this list just contained only Frege, Russell, Spengler and Sraffa; Wittgenstein later added the additional six names (*cf.* CV [R] 101, note 8). For studies of Spengler's influence on Wittgenstein see DeAngelis 2007 and 1994, and Haller 1988.

¹² On Spengler's 'physiognomic' historical methodology see Spengler 1918, ch. 3. At some points Wittgenstein talks about the 'physiognomy' of meaning (e.g. PI §568); but it is not clear that there is a connection with Spengler's physiognomic historical methodology.

¹³ In the Preface to the Revised Edition of *The Decline of the West* Spengler writes, 'I feel urged to name once more those to whom I owe practically everything: Goethe and Nietzsche. Goethe gave me method, Nietzsche the questioning faculty ...' (Spengler 1918, xiv).

¹⁴ *Cf.* Gordon L. Miller's Introduction in Goethe's *The Metamorphosis of Plants* [*Die Metamorphose der Pflanzen*] (Cambridge, MA: MIT Press, 2009 [1790]), xvi.

¹⁵ 'Every Culture, every adolescence and maturing and decay of a Culture, every one of its intrinsically necessary stages and periods, has a definite duration, always the same' (Spengler 1918, 109-10; emphasis in the original).

¹⁶ Spengler's views about the inevitable demise from culture to civilization changed in his later work. Spengler continued to hold that the end of culture is inevitable, but he moved away from a pessimistic determinism about the life of cultures to a more teleological view. In *Man and Technics* (*Der Mensch und Technik*, 1932), Spengler puts forward the view that modern industrial society is the most advanced manifestation of 'technics', a quasi-metaphysical power (in some respects akin to Nietzsche's 'will-to-power'), and that the end of a culture with this advanced manifestation ought to please us. On this difference between early and later Spengler see Kidd 2012a. I am indebted to Ian James Kidd, not only for what I have learned from his work on Spengler, but more importantly for his very helpful comments on the sections of this chapter on Spengler.

¹⁷ See note 1, above.

¹⁸ Also amongst these remarks is the remark I quoted in the first endnote, which I claimed suggests that Wittgenstein saw his earlier theories of meaning as scientific (see note 1, above).

¹⁹ On Wittgenstein's hostility towards the idea of a 'science of aesthetics', see Severin Schroeder's chapter in this volume (Schroeder 2017).

²⁰ On 'signs of scientism', see Haack 2009.

²¹ Drury 1981, 94. In the same conversation Wittgenstein went on to say 'I am not a religious man but I cannot help seeing every problem from a religious point of view' (*ibid.*). In an earlier publication Drury recalls Wittgenstein's remark slightly differently: 'I am not a religious man, but I cannot help seeing every *thing* [*sic*] from a religious point of view' (Drury 1973, xiv; my emphasis added). In a later publication Drury recalls it differently still: 'Perhaps in a hundred years people will *really* want what I am writing' (Drury 1984, 160; my emphasis added). Wittgenstein's

claim that he ‘cannot help seeing every problem/thing from a religious point of view’ has been the subject of much interest. It led Drury to wonder ‘whether there are not dimensions in Wittgenstein’s thought that are still being largely ignored’ (Drury 1981, 94) and it intrigued Norman Malcolm so much that he devoted the final work of his life to examining what Wittgenstein could have meant by it (see Malcolm 1993). (See Beale 2011, 107-8.)

²² For accounts of forms of scientism, Stenmark 2003, 2001 and 1997.

²³ See Haack 2009, 2-3. The primary and original meaning of ‘scientism’ is neutral: ‘thought or expression characteristic of scientists’ (the primary definition in the *New Oxford American Dictionary*). Less crudely, this means something to the effect of ‘the methods, mental attitude, doctrines, or modes of expression characteristic or held to be characteristic of scientists’ (the primary definition in *Webster’s Third New International Dictionary of the English Language*). Now rare, this was its only meaning until it gained a pejorative connotation. For historical accounts of scientism see Haack 2009, Olson 2008, Sorell 1991 and Wellmuth 1944.

²⁴ Hayek wrote a memoir about Wittgenstein entitled, ‘Remembering My Cousin, Ludwig Wittgenstein’ (*Encounter*, August 1977, 20-22).

²⁵ Hayek’s seminal study of scientism, ‘Scientism and the Study of Society’, was divided into three parts and each was published in *Economica* over three respective years between 1942 and 1944 (Hayek 1942; 1943; 1944).

²⁶ Hayek uses the capitalized ‘Science’ to denote the narrower modern use of ‘science’, synonymous with ‘natural and physical science’ (the dominant sense in ordinary use today). Citing the quoted passage from Hayek, Karl Popper misleadingly writes that ‘The term “scientism” meant originally “the slavish imitation of the method and language of [natural] science”, especially by social scientists; it was introduced in this sense by Hayek ... ’ (Popper 1972, 185 n.35). Popper is probably correct that it was introduced in this sense by Hayek, at least for the first time in print; but this is not what ‘scientism’ meant originally, in any sense. To be sure, it is one of the earliest recorded uses of scientism as a pejorative; but there are various instances of it as a pejorative prior to Hayek; e.g., in the Preface to George Bernard Shaw’s 1921 play *Back to Methuselah*: ‘... the iconography and hagiology of Scientism are as copious as they are mostly squalid’ (Shaw 1921, 541). The earliest occurrence of ‘scientism’ cited by the *OED* is from 1877 (*Fraser’s Magazine for Town and Country, New Series, Vol. XVI, September 1877, London: Longmans, Green, and Co., 274*). This is not to suggest that there were not instances of scientism before the coinage of the term. Hilary Putnam once suggested (to me in conversation in 2012) that Julien Offray de La Mettrie’s 1747 book *L’homme Machine* might be the origin of scientism in philosophy. (Therein La Mettrie argues that the soul, consciousness and the will are all reducible to bodily processes.) James Wellmuth suggests we can trace scientism back at least to Descartes (Wellmuth 1944, 6). Tom Sorell concurs, arguing that we can trace it to Descartes and Francis Bacon (Sorell 1991, xi & Ch.2). Philip Kitcher suggests that the advent of scientism occurred concomitantly with the advent of modernity (Kitcher 1993, 390). Mikael Stenmark suggests that scientism has ‘been around as long as science has existed’ (Stenmark 2003, 783). If Stenmark means that scientism has probably been around since the articulation of the notion of science in the early-modern period, then he is probably correct. Prior to the scientific revolution it would be difficult to identify instances of scientism because there wouldn’t be a corresponding notion of ‘science’ in anything like the sense in which we use it today (see Cottingham 2005, 106-7).

²⁷ On the importance of Wittgenstein's distinction between conceptual and empirical investigations and the relation of this to scientism, see James C. Klagge's chapter in this volume (Klagge 2017).

²⁸ Warren Goldfarb, 'Wittgenstein on Understanding' (*Midwest Studies in Philosophy*, XVII, 1992, 109-122). An abridged version was published three years earlier in *The Journal of Philosophy* under the title 'Wittgenstein, Mind, and Scientism' (Vol. 86, No. 11, November 1989).

²⁹ Goldfarb argues that this scientific picture of mental phenomena is most explicitly attacked in PI §158 (Goldfarb 1992, 112). See also PI §§152, 131.

³⁰ This most prominently emerges in Wittgenstein's critique of James George Frazer's anthropological account of religious practices in *Remarks on Frazer's Golden Bough*. For accounts of Wittgenstein's criticisms of Frazer, see Annalisa Coliva's paper in this volume (Coliva 2017).

³¹ Many thanks in particular to Ian James Kidd for comments on earlier drafts, and to David E. Cooper for comments on an earlier draft. Thanks also to Maximilian de Gaynesford and Severin Schroeder for feedback on the sections of my doctoral thesis from which some of this chapter is drawn. Some of this material was presented in the Wittgenstein Forum at the University of Reading in 2014; I am grateful to the participants on that occasion for discussion.