



<http://social-epistemology.com>
ISSN: 2471-9560

Afterword on *Social Epistemology's* Special Issue on 100 Years of Max Weber's 'Science as a Vocation'

Mark Erickson, University of Brighton, M.Erickson@brighton.ac.uk

Erickson, Mark. 2020. "Afterword on *Social Epistemology's* Special Issue on 100 Years of Max Weber's 'Science as a Vocation'." *Social Epistemology Review and Reply Collective* 9 (3): 18-24. <https://wp.me/p1Bfg0-4T1>.

In his scientific work [Max Weber] always remained dedicated to purely theoretical, that is, strictly conceptual, work. In this respect he was a shining example for all who are engaged in science, and so he will remain. On the other hand, it cannot be denied that Weber occasionally expressed his view on the vocation of science in a very abrupt manner that provoked contradiction. This is particularly true of his lecture, ‘Science as a Vocation’, which he delivered a year before his death to students in Munich and subsequently published in pamphlet form. As this talk can indeed give rise to misunderstandings, it is worth considering in some detail —Heinrich Rickert ([1920] 1989, 80).

Max Weber’s ‘Science as a Vocation’ caused considerable controversy in the early 1920s across German academe. Significant critics weighed in on all sides including Ernst Curtius, a leading philologist, philosopher Heinrich Rickert (a close personal friend of the Webers), Arthur Salz, a leading political economist, Ernst Troeltsch, a member of the Bavarian parliament, and phenomenologist Max Scheler all of whom wrote extended articles—and in Erich von Kahler’s case an entire book *Der Beruf der Wissenschaft* [*The Vocation of Science*] (Berlin: Bondi 1920)—addressing the issues raised by the lecture.

Looking across these, and other, contemporaneous commentaries collected by Peter Lassman, Irving Velody and Herminio Martins in 1989 to mark the 70th anniversary of Weber’s lecture (Lassman, Velody and Martins 1989), it is clear that a great many of the issues raised by these writers in 1920 still troubled us in 1989 and continue to do so today. Indeed, this special issue of *Social Epistemology* shows that a re-examination of Max Weber’s ‘Science as a Vocation’ lecture of 1919 is, as Alexander Ruser (2020) notes in his paper, more important than ever. Why is a 100-year-old lecture so important now? We can, as many of the papers here do, point to a number of prescient remarks made by Weber regarding the role and operation of science in society but it is when we consider the lecture as a whole that the full importance comes to the fore.

Science as Profession and as Vocation

Weber’s lecture highlights a central problem of science through its relentless focus on the ironic paradox, as Alexander Antonovskiy and Raisa Barash (2020) note in this issue, between science as a profession and science as a vocation, where scientists are caught between a commitment to the ethos of science they were drawn to, and the products of scientific endeavour. Universities have become, as Weber predicted in 1919, albeit in a rather nationalistic way, factories for producing outputs that have relevance and consequences for society that run in the face of the calling and vocation of those that are producing them, leaving practitioners in contradictory, dissonant states, trying to reconcile commitment to a project with the demands and requirements of career.

The diversity of subject matter that the papers in this special issue address attest to not only the way that Weber saw the multifaceted features of science in society, but also to the applicability of his work to both contemporary and historical social scientific analysis beyond

the perceived boundaries of ‘science’. Whilst Weber’s ostensible subject is science, he draws the reader into thinking about the complexities of a disenchanting, modern society, the role of state and other institutions, and the meaningfulness, or otherwise, of our lives. Weber’s deployment of fundamental questions still has an urgency in the contemporary world. But Weber’s lecture also provides considerable methodological and ethical guidance for the social scientist, as almost all of the papers in this special issue observe.

Weber’s methodological injunctions regarding objectivity and ethical neutrality connect both backwards to his critique of science as a social institution and forwards to how we (social) scientists should carry out our work. Lada Shipovalova’s (2020) paper in this special issue notes that the duty of the scientist and the nature of objectivity are bound together in a communicative project, but this is a model that presumes good faith and equal actions on all sides. This is, of course admirable and we all want to see better public science communication. However, the ideals expressed here, and by Weber, do not always match up to the practices of professional scientists, something that Weber, had he spent more (or any?) time in the laboratory, would have noticed.

How to Define Science?

One of the core issues with Weber’s lecture concerns the problem of definition. Weber was, at the time of his lecture, castigated by some for his poor understanding of what science actually is. Ernst Curtius, for example, in his direct response to ‘Science as a Vocation’ written in 1920, questions Weber’s position:

The very personal character of Max Weber’s position means that, in consequence, the treatment of the problem at issue is very one-sided. This is evident in the very concept of science with which Max Weber operates, one which appears to be oriented on the mechanical natural sciences of the last three hundred years and on the present-day ideal of scrupulous precision (Curtius [1920] 1989, 73).

Curtius’s argument here is that science is now *so* different from that of, say, Leonardo that it is not possible to claim continuous progress in science. It is ‘a fiction and one that has to be abandoned’ (ibid).¹ Others defended Weber, notably Ernst Troeltsch ([1921] 1989) who saw

¹ In their paper, Antonovsky and Barash (2020) ask why nobody noticed that in his lecture Max Weber misattributed the words *non quod, sed quia absurdum est* to St. Augustine; they are in fact from Tertullian. They consider this misattribution to be a major mistake that also indicates a lack of critical engagement with Weber’s text at the time of its production. As I noted earlier, there was considerable critical engagement with Weber’s text at the time, some of it quite hostile (Lassman, Velody and Martins 1989). One commentator was Ernst Robert Curtius (1886-1956), a philologist, literary and cultural critic, a major interpreter of French literature. Victor Klemperer saw him as a major rival in his early career, but conceded, when reading Curtius’s obituary in 1956, that he was a very good academic (Klemperer 2004, 437). Curtius’s area of specialism was European literature in the Middle Ages, but given the breadth of education and erudition it is likely that he would have come across, and understood, the words *credo non quod, sed quia absurdum est*. Why, we could ask, did Curtius not pick up Weber for his misattribution? After all, his essay on Weber was quite hostile (Curtius [1920] 1989). We now have two eminent and erudite academics making the same error, and I think we need to find an explanation that goes beyond lack of attention to detail or simple stupidity. Tertullian’s words emerge at different points and in different contexts in European thought. The first phase, in English theological thought in the 17th century correctly attributes the words to him. The second phase

Weber's critics (especially Arthur Salz, but also Curtius) as trying to traduce him by caricaturing his account of science.

This problem of definition pertains in the German language original text, but is compounded when Weber is translated into English. As Lassman and Velody note in their 70th anniversary essay:

It should be recalled that the term *Wissenschaft* has a much broader meaning than the English word 'science'. As is well known to all who have studied Weber's writings on this topic his account of science turns on a perplexing mixture of elements drawn from a 'positivistic' or 'naturalistic' view of science allied to an interpretive view of the social (Lassman and Velody 1989, 164).

The problem of defining science (and, for that matter, vocation, calling and profession) besets interpretations of 'Science as a Vocation'. Ilya Kasavin (2020) takes on the issue of what a profession is directly in their paper deploying an innovative combination of a specific classificatory scheme from David Resnik and Mary Douglas's 'grid and group' analysis to try and disentangle some of the knotty problems left behind by Weber in regard to definitions of profession, calling and vocation.² However, the deeper problem of quite what it is we are talking about when we say 'science' persists to the present day. We could, as Curtius implies Weber is doing, tighten our definition to 'natural' science' or even 'the exact sciences' but problems again arise.

In my work I deliberately use the term 'formal science' rather than 'natural science', where formal science is the practices and knowledges that are carried out and articulated in accredited scientific institutions (universities, research laboratories, etc.) and become formalized through institutional acceptance. This is often labelled "natural science" but this latter term implies a privileged and direct connection to "nature" that is somehow denied to the non-scientist (Erickson 2015). Does this resolve the problem? In the short term, perhaps, but at a deeper and wider level it does not as our shared social construct of 'science' is informed by the entrenched scientism of the twentieth and twenty-first centuries, providing us with a story of science that is at odds both with what formal science practice is, and what formal scientific knowledge can do. As Mary Midgley trenchantly remarks,

followed Voltaire's misattribution (almost certainly deliberate) of Tertullian's words to Augustine in *Le Dîner du Comte de Boulainvilliers*: "C'est pourtant ce ridicule que saint Augustin a trouvé divin; il disait: «Je le crois, parce que cela est absurde; je le crois, parce que cela est impossible.»"

[https://fr.wikisource.org/wiki/Le_Diner_du_comte_de_Boulainvilliers accessed 26th February 2020]. It was not until Gaston de Flotte (1805-1882) uncovered this misattribution in the 19th century that later, Francophone, readers became aware that the words were from Tertullian and not Augustine. It is, of course, pure speculation but I would venture that Weber, and Curtius, came across Tertullian's words already misattributed to Augustine probably via Voltaire; that that was the general understanding of the origin of these words at that time.

² Grid and group analysis can be applied to science in a number of ways. For example, where Kasavin uses grid and group to position 'science' as a whole in the schema, Cerroni and Simonella use interviews with scientists to ascertain their attitudes towards group membership and constraint, and then places their sample in one of the four possible spaces in the grid-group schema (Cerroni and Simonella 2014).

scientism has ‘the ambition to take over the whole of human knowledge for physics and chemistry’ (Midgley 2010, 92).

Elena Chebotareva (2020), in this special issue, notes very similar definitional problems regarding ‘engineer’, but connects this to another of Weber’s concerns: professional ethics. In their overview of the history of sociology of engineering Chebotareva notes various paths trodden by sociologists of various orientations, but a lack of consensus, now compounded, or confounded, by the rise of Science and Technology Studies (STS) and actor-network theory (ANT).

Chebotareva agrees with Law’s ANT-inflected position which sees our reality as ‘vague, multiple, heterogeneous, and uncertain in nature’ such that an exact and universal definition of ‘engineer’ will never be determined. This is quite right, but the issue of why it is that we *do* have dominant definitions in our culture needs to be addressed. Our technoscientific world, where many formal discourses are dominated by scientism, conflates science, technology and engineering in such a way that these expand to become a bigger object than the sum of their parts.

Science Communication, Government and Public Engagement

This scientism/technoscience combination is palpable in the story of science communication in the Soviet Union that Svetlana Shibarshina and Evgeny Maslanov (2020) present in this special issue. Their detailed account of the efforts of the Soviet Union to marry science as vocation and profession in its science communication and public engagement policies presents a time capsule from the latter part of the twentieth century, and shows the particular concerns of the Soviet state in wanting to marry political ideology with science and engineering practices.

Whilst this was of very strong concern to a government articulating a ‘scientific’ doctrine of Marxism-Leninism, I could not help but note similarities to my own society, with a quite different political system, at the same time. Popular science and school clubs presented science and technology, great scientists and impressive engineering to young people in the UK in the 1970s and 80s. The intention may have been different but the consequence—as Shibarshina and Maslanov insightfully note—was similar: a strong deficit model disseminated in the public sphere, and a declining interest in science as either profession or vocation in the late twentieth century.

Weber’s horizon scanning was informed by pessimism (Rickert would say ‘negative dogmatism’ (Rickert [1920] 1989, 23)), but perhaps we can use his insights to inform new ways of working that take us out of the iron cages and ironic paradoxes that beset us. Sung Ho Kim (2020), in their paper, notes that the slow death of God reached its apogee in Weber’s identification of re-emerging polytheism.

The many gods of old, without their magic and therefore in the form of impersonal forces, rise up from their graves, strive for power over our lives, and begin once more their eternal struggle among themselves (Weber 1989, 23).

Perhaps a way forward for us is to embrace the polytheism that Weber identifies as re-emerging, noting, as Kim does, that Weber doesn't envisage a 'peaceful dissolution of the grand metanarratives of monotheistic religion and universal science into a series of local narratives' but fragmentation into a plurality of incommensurable metanarratives.' In contrast to Habermas (1984), who reads Weber very literally regarding this point—'Weber goes too far when he infers from the loss of the substantial unity of reason a polytheism of gods and demons' (249)—we could read Weber in a different way.

Rather than trying to mend or rectify the projects of modernity and modernization, sticking with our tried and tested, but normative and conforming career-enabling social science choices, we could try something quite different. After all, *our* vocation calls us to 'stay with the trouble', as Donna Haraway (2016) eloquently puts it, to follow our calling to investigate and explain regardless of cost or 'output'. We need to take a step further and to immerse ourselves in a different worldview, that of a polytheistic world which does not require us to impose inappropriate and artificial conceptual schemes onto the objects of inquiry we address. There are few places we can go to for this, but Paul Feyerabend's (1978, 1999, 2011) relentless focus on the world of archaic ancient Greece, the time of Homer and the pre-Presocratics, provides some signposts.

Our problems with definition stem from the 'conceptual totalitarianism' that surrounds us: put simply, we cannot escape from the conceptual framework we are socialised into. Our social science methodologies are infused with these, and the relentless push of theory behind us impels us to conclusions that are expected, predictable even.

Feyerabend's identification, with Karl Popper (2012) and Martin Heidegger (1968), of the poem of Parmenides marking the start of this turn to theory and abstraction as the main modes of formal thought provides a clue as to where there exists ways of looking at the world that are not working in this way. The poems of Homer speak to us very clearly down the millennia since they were composed, but they are examples of very different ways of thinking and being. My recent ethnographic work in a microbiology laboratory was an attempt to reimagine formal science through the lens of Homeric, epic verse (Erickson 2018). Science, however much we try to define and constrain it, retains a mythical and epic character and it is only through seeing it in this light that we can begin to get past our modern and reductive vision of science as a vocation. Epic poetry can confront and break the iron cages that constrain our thoughts about science and its calling.

The 'Science as a Vocation' lecture became a 'confession' that 'burst from the speaker's breast in jerky explosions'; so, Weber gave his audience the impression of labouring hard to give birth to new ideas"—Joachim Radkau (2009, 487).

Was Weber's lecture a 'confession'? The lecture sets out some very clear ideas about what vocation, calling, profession and science are. Weber also makes predictions about the course that science will take in Germany, and other industrial societies, and he was pretty much correct here. His methodological injunctions to fellow social scientists are still followed by many to this day, and where they are departed from that is done with clear reference to the

Weberian strictures. However, the really big, and really difficult, question that Weber addresses, both actively and passively in ‘Science as a Vocation’, is one that he could not answer and that perhaps we cannot answer today. That question is ‘what *is* the value of science?’

References

- Antonovskiy, Alexander Yu and Raisa Ed Barash. 2020. “The Mission of the Scientist Yesterday and Today: On the Centenary of Max Weber’s *Wissenschaft als Beruf*.” *Social Epistemology* 34 (2): 117-129.
- Cerroni, Andrea and Zenia Simonella. 2014. “Scientific Community Through Grid-Group Analysis.” *Social Science Information* 53 (1): 119-138.
- Chebotareva, Elena E. 2020. “Engineers: Bridging the Gap between Mechanisms and Values.” *Social Epistemology* 34 (2): 151-161.
- Curtius, Ernst Robert. [1920] 1989. “Max Weber on Science as a Vocation.” In *Max Weber’s ‘Science as a Vocation’* edited by Peter Lassman, Irving Velody and Herminio Martins, 70-75. London, Boston: Unwin Hyman.
- Erickson, Mark. 2018. “Homer in the Laboratory: A Feyerabendian Experiment in Sociology of Science.” *Social Epistemology* 32 (2): 128-141.
- Erickson, Mark. 2015. *Science, Culture and Society: Understanding Science in the Twenty-First Century*. 2nd edition. Cambridge: Polity.
- Feyerabend, Paul. 2011. *The Tyranny of Science*. Cambridge, UK: Polity.
- Feyerabend, Paul. 1999. *Conquest of Abundance: A Tale of Abstraction Versus the Richness of Being*. Chicago: University of Chicago Press.
- Feyerabend, Paul. 1978. *Against Method*. London: Verso.
- Habermas, Jürgen. 1984. *The Theory of Communicative Action Volume 1: Reason and the Rationalization of Society*. Cambridge: Polity
- Haraway, Donna. 2016. *Staying with the Trouble: Making Kin in the Chthulucene*. Durham NC: Duke University Press.
- Heidegger, Martin. 1968. *What is Called Thinking?* New York Harper & Row.
- Kasavin, Ilya T. 2020. “Science and Public Good: Max Weber’s Ethical Implications.” *Social Epistemology* 34 (2): 184-196.
- Kim, Sung Ho. “Science as an Ethical Mode of Life: On the Centenary of Max Weber’s *Wissenschaft als Beruf*.” *Social Epistemology* 34 (2): 142-150.
- Klemperer, Victor. 2004. *The Lesser Evil. The Diaries of Victor Klemperer 1945-59*. London: Phoenix.
- Lassman, Peter, Irving Velody and Herminio Martins. 1989. *Max Weber’s ‘Science as a Vocation’*. London: Unwin Hyman.
- Lassman, Peter and Irving Velody. 1989. “Max Weber on Science, Disenchantment and the Search for Meaning.” In *Max Weber’s ‘Science as a Vocation’* edited by Peter Lassman, Irving Velody and Herminio Martins, 159-204. London, Boston: Unwin Hyman.
- Midgley, Mary. 2010. *The Solitary Self: Darwin and the Selfish Gene*. Durham: Acumen.
- Popper, Karl. 2012. *The World of Parmenides: Essays on the Presocratic Enlightenment*. Edited by Arne F. Peterson and Jorgen Mejer. Abingdon, Oxon: Routledge.
- Radkau, Joachim. 2009. *Max Weber: A Biography*. Cambridge: Polity.
- Rickert, Heinrich. [1920] 1989. “Max Weber’s View of Science.” In *Max Weber’s ‘Science as a Vocation’* edited by Peter Lassman, Irving Velody and Herminio Martins, 76-86. London, Boston: Unwin Hyman.

- Ruser, Alexander. 2020. "From Gamble to Conformity? Academic Careers, Ethical Neutrality and the Role of 'Professional' Social Sciences." *Social Epistemology* 34 (2): 162-173.
- Shibarshina, Svetlana V. and Evgeny V. Maslanov. 2020. "Science Communication in the Soviet Union: Science as Vocation and Profession." *Social Epistemology* 34 (2): 174-183.
- Shipovalova, Lada. 2020. "Max Weber's 'Inconvenient Facts' and Contemporary Studies of Public Science Communication." *Social Epistemology* 34 (2): 130-141.
- Troeltsch, Ernst. [1921] 1989. "The Revolution in Science." In *Max Weber's 'Science as a Vocation'* edited by Peter Lassman, Irving Velody and Herminio Martins, 58-69. London, Boston: Unwin Hyman.
- Weber, Max. 1989. "Science as a Vocation." In *Max Weber's 'Science as a Vocation'* edited by Peter Lassman, Irving Velody and Herminio Martins, 3-31. London, Boston: Unwin Hyman.