



Scientificity before Scientism: The Invention of Cultural Research in German Studies of Antiquity 1800–1850

Monika Krause¹ 

Accepted: 10 February 2024
© The Author(s) 2024

Abstract

This paper examines how scholars of Greek and Roman antiquity in the German-speaking territories in the first half of the nineteenth century define scientificity (*Wissenschaftlichkeit*). I will argue that antiquity studies in this period of its foundation as a discipline is an instructive case to examine with regard to questions as to how scientific knowledge is established as different from other forms of knowledge, how scientific fields establish relative autonomy from other fields and what forms scientific autonomy can take. Widely recognised as important for the history of the modern research university, the case is not only interesting because it is influential. It is also interesting because the discussions in this period are so different to discussions in the later nineteenth century in the social sciences and the humanities, which have shaped debates about scientificity in sociology and cognate disciplines: We find here a notion of social and cultural research as a scientific endeavour, discussed not primarily with reference to or in defence against the natural sciences, but rather defined against imitative learning and the expectation that research provide moral support for the emerging Germany by idealizing the Greeks. The case highlights moralization as a source of heteronomy in cultural fields in addition to the more widely discussed forces of the market and the influence of the state.

Keywords History of the university · Field theory · Scientific autonomy · Field autonomy · Antiquity studies · Moralization

Introduction

In the late 18th and early nineteenth century, scholars in the universities of German states experimented with new ways of dealing with sources and evidence, new ways of writing and new ways of bringing established scholars and students together. The university was to be a place for science—“*Wissenschaft*”, the German term that

✉ Monika Krause
m.krause@lse.ac.uk

¹ Department of Sociology, London School of Economics, Houghton Street, London WC2A 2AE, UK

captures academic work across what are today the natural sciences, the humanities and the social sciences—and the idea of science was newly tied to the idea of open-ended research. This was expressed, among other things, in the seminar as a new social form, a place where research was both conducted and assessed (Spoerhase, 2015, 2019). This was also accompanied by a new idea of what a lecture was: a place where new thought could be observed as it was formed (Spoerhase, 2019, Schelling, 2016 [1803], Schleiermacher, 1956 [1808], Hamann, 2014: 109–111).

A number of the figures associated with the reform of the university in the late eighteenth century were what we might today call classicist - academics concerned with textual and other sources on the Greek politics and the Roman empire of classical antiquity. The field was then conceived more broadly as “antiquity studies”, or - even more broadly with a slightly different emphasis - as “philology”.

The paper examines how science and scientificity were understood in German studies of antiquity of the first half of the nineteenth century, centred on the work of August Boeckh in the context of Christian Gottlob Heyne, Friedrich Wolf and Wilhelm von Humboldt as predecessors and Friedrich Welcker, Karl-Otfried Müller and Gottfried Hermann as contemporaries.

I will argue that antiquity studies in this period of its foundation as a discipline is an instructive case to examine with regard to questions as to how scientific knowledge is established as different from other forms of knowledge, how scientific fields establish relative autonomy from other fields and what forms scientific autonomy can take.

The interest of the case lies partly in its significance for and influence on later periods. The early nineteenth century in the German-speaking territories, and particularly in their protestant parts, has long been recognised as important in the history of universities (Clark, 2006; Schelsky, 1971; Turner, 1981, 1983) if perhaps less in the history of science. The reorganization of the university, which I will discuss, has profoundly influenced the idea of academic practice in Germany and elsewhere, particularly also in the United States (Clark, 2006; Levine, 2021).

The discussions in this field in this period are also interesting because they are so different from discussions in the social sciences and humanities in the second half of the nineteenth century, which have shaped debates about what it might mean to be a science within modern social scientific disciplines and to a lesser extent history. We find among the scholars of this earlier period a definition of social and cultural research as a scientific endeavour in terms that are both familiar and strange: scholars pursue a notion of research, which tries to understand culture and society in an open-ended manner based on the critical examination of sources. They insist on the autonomy of scientific work, but they do so in specific ways: They write from a position of confidence — and unlike much of the later discussion, most notably in Dilthey (1989[1893]), who has been heralded as the founder of the humanities, especially in the United States (Alexander, 1987; Alexander, 2008; Geertz, 1983; Rickman, 1979), are not defensive vis-à-vis the natural sciences, which became culturally dominant only after the 1860s.

Rather, they feel the need to argue against a kind of moralism that at least in its specific form strikes us as rather peculiar today. Insisting that the Greeks were “unhappier than most believed” (Boeckh, 1851 [1817]: 792),¹ scholars resisted the

¹ All translations from the German are the author's.

expectation that research provide moral support for the emerging Germany by idealizing the Greeks. In aiming for the “truth”, classicists should avoid “unconditional worshipping” and shouldn’t hide “imperfections” (Boeckh, 1851 [1817]: 2).

In what follows, I will first discuss relevant traditions in the sociology of science and knowledge, which have opened up questions about scholarly practices and the different meanings given to scientificity, objectivity, and impartiality. I will then address the institutional context of antiquity studies at the time before analysing how, as a presupposition of open inquiry, ancient Greece is transformed from a timeless ideal to a historical object of knowledge in the period. I will discuss August Boeckh’s programme of pursuing a “knowledge of the known” and examine more closely what scientificity is defined against in the programmatic texts of these authors. I conclude by discussing implications for future research.

German antiquity studies as a case in the sociology of science and knowledge

Researchers have long recognised the importance of historical cases for answering sociological questions about science. The kinds of questions scholars asked of historical cases have shifted over time: Earlier classic work in the history and sociology of science treated “modern science” as a relatively unified entity. “Science” appeared in this work as an outcome that is known but that had to be dated and explained by some factors or others.

Empirical research in science and technology studies and the history of science has since drawn attention to the range of scientific logics and practices. Following insights into this “disunity of science” (see Daston, 1992; Knorr Cetina, 1991, 1999; Biagioli, 1996; Galison & Stump, 1996), scholars have been asking more open-ended questions: The history of science is no longer the history of the “discovery” of a logic that somehow preexists in an ideal form, but the history of practices, institutions and ideals that can take different forms.² The findings of science were not revealed to be arbitrary, but they were revealed to be the result of practices that were systematic in different ways.

As attention shifts from the history of science in unitary terms to interest in the variegated forms of scientificity, work on the social sciences and humanities also becomes more relevant to general discussions (Daston & Most, 2015, Creager, Lunbeck, and Wise, 2007, Guetzkow et al., 2004, Kohler, 2019, Lamont, 2009, Mallard, 2015, Krause, 2021). The reader should be reminded from the outset that the German term *Wissenschaftlichkeit*, unlike the term “scientificity” never and especially not in the period under investigation concerns questions about the natural sciences in particular. Then and now, scholars

² Historians and sociologists of science continue to defend insights about the disunity of science against non-specialists and against some philosophers of science. Assumptions about a monolithic “science” with an associated unitary form of “objectivity” have also somewhat ironically been perpetuated and renewed by critical work, initially from within feminism (Bordo 1987; Fox-Keller 1985, see discussion in Daston 1992) and now postcolonial theory (e.g. Seth 2020).

of all disciplines define themselves as scientists (“Wissenschaftler”) as well as as members of their specific field. To say “natural science” in German, it is always necessary to specify “natural science” (“Naturwissenschaft”).

What does it mean to do “science”? How is scientific knowledge established as different from other forms of knowledge? What is science defined against? How do scientists negotiate the boundaries between their practices and those other practices, which they consider relevant alternatives?

In answering these questions, I draw loosely on field theory inspired by Pierre Bourdieu (1990, 1993, 1996, 1974) and others and examine German antiquity studies as a case. Different emphases within the broader field-theoretical tradition can yield different strengths in specific research projects. For this paper, I take from this tradition, firstly, a sensitivity to communities of peers and relevant outsiders: Neil Fligstein has memorably described a field as a group of actors who “gather and frame their actions vis-à-vis one another” (Fligstein, 2001: 108). They may be in direct communication or be oriented towards shared assumptions or symbolic stakes, which they are claiming together or in competition to each other. In what follows, I will thus draw on broader intellectual histories (e.g. Hamann, 2014, Clark, 2006; Marchand, 2003, 2009; Bernal, 1987), but also look at one particular discipline, antiquity studies.

A focus on a field as a particular community of actors who take each other into account allows, secondly, to get closer to actors’ concerns and practices; it helps me to analyse discourses in relationship to the dialogue with colleagues, opponents and relevant outsiders and in relationship to particular practices and contents of knowledge. This emphasis contrasts with discourse theoretical approaches and with a tendency to take the ideas of earlier figures out of their context, treat them solely as statements and put them directly in dialogue with contemporary concerns.

Field theory, thirdly, provides a particular orientation towards observing boundary-drawing concerning specialised practices, which is also pursued in other traditions (Gieryn, 1999; Kaldewey, 2013). As fields, spaces of cultural production are thought to be characterised by forms of relative autonomy, a logic of their own that allows practices to be pursued for their own sake, which has to be established and which may or may not be in place in any given context.

There has been a tendency to focus on autonomy as a question of degree, whereby fields are described as more or less autonomous. But the precise forms of relative autonomy can also be examined in a more open manner, with close attention to what autonomy is defended against (Benson, 1999, 2005, Krause, 2018, see Bourdieu, 1994: 3). Rather than assume that autonomy is opposed to the state and the market, I ask in a more open manner about the forms of heteronomy or “symbolic pollution” that actors seek to avoid (Krause, 2014: 110–114).

The discipline of classics has recently been the subject of engaging historiography, which I draw on here (Rebenich, 2021, Guthenke, 2020, Lanza and Ugolini, 2022, Harloe, 2013; see also Grafton, 1983, Momigliano, 1950, 1982). Debates concerning the varied histories of objectivity (Daston, 1992; Galison & Daston, 2010) and related conversations about impartiality (Daston, 2019; Murphy & Traninger, 2014) are clearly relevant to the investigation at hand. But the authors and sources I am considering here are more centrally concerned with scientificity (Wissenschaftlichkeit), research (Forschung) and truth (Wahrheit).

The invention of philology and the autonomisation of german antiquity studies

Between the late eighteenth century and the 1830s, German antiquity studies gained a kind of autonomy from other disciplines inside the university and from a context outside the university that was very favourable to it.

The ancient languages had had a place in universities since their foundation. In the renaissance and baroque university, the ancient languages were thought to support law and theology both of which required the reading of sources in Greek, Hebrew or Latin (Bolter, 1980). The invention of modern philology around 1800 was in opposition to both humanist classical education with its focus on imitation and repetition³ and the very strict forms of utilitarianism of the enlightenment, which had considerable influence on universities in the eighteenth century (Ringer, 1969).

Inside the university, philology had to separate itself from theology and church teaching, law and philosophy. A change in status for the study of ancient languages is often associated with the person of Friedrich August Wolf, the son of a teacher born 1759 in the Harz near Leipzig. According to legend, he was told to register as a student of either law or theology by Christian Gottlob Heyne, himself an influential classicist, upon arriving at the University of Goettingen in 1777. Wolf insisted on enrolling as a student of philology, helping to create a new space beyond the traditional faculties of philosophy, law, and theology.⁴ He also insisted on philology as a discipline of research as opposed to passive learning (Riedel, 1996, Spoerhase and Dehrmann 2011).

Wolf became best known for his claim of “discovering” that the Iliad and Odyssey are not the work of one author, which exemplified the kind of finding that the critical study of sources could reveal (Wolf, 1985 [1795]). In his work “Prolegomena to Homer” Wolf took the limitations of what can be known about the past seriously and considered the received editions and manuscripts in careful detail. He concluded that the poems were originally performed orally and shaped by later editors, who sought to “improve” rather than truthfully render the text, which they had found. The study of critical sources was less original than Wolf claimed: The originality of the work was contested by others, including his teacher Heyne at the time (Harloe, 2013). Anthony Grafton has shown that the work built on earlier baroque styles of learning and on critical biblical scholarship (Grafton, 1981, see also Trueper, 2020).

But Wolf combined the critical studies of sources with a broader focus on culture building on Herder (Herder, 1969 [1772]) and other earlier authors, positing culture not just as an important context but as a target of inquiry. Though the research question in his most famous work is “What can be known about the authorship of the

³ This persisted longer in England (Rebenich 2021, Clarke 2006); indeed there is some indication that this older humanistic ideal is still stronger in the UK, as evidenced, for example, by the focus on essays and with that, on rhetoric in assessment as opposed to the research papers demanded by German universities.

⁴ Clark seems to confirm the conflict with Heyne but notes that philology had existed as a “major” for example at Erlangen since 1749 and also at Goettingen before Wolf (Clark 2006: 169–170).

Odyssee?" he suggests that the proper allocation of texts is a means towards a larger end, the understanding of the "ideosyncracies of writers and *periods* ("Eigentuemlichkeit der Schriftsteller und Zeiten.") (Wolf, 1833 [1807] 24, my emphasis).

Consider Wolf's answer to the question "why learn Latin" (Wolf, 1833[1807] 85ff), which arises in his time in the context of the loss of influence of the clergy but also in the loss of influence of Latin as a language of science. Contemporary science, Wolf writes, has grown beyond the influence of Greece and Rome. Wolf suggests that this means that Latin should no longer be studied because it is useful for other disciplines. Rather, scholars concerned with ancient languages should develop their own ends. Latin, he says, should be studied because it is a mirror of—or perhaps window into—the culture of the Romans ("Spiegel des Nationalgeistes" (Wolf, 1833[1807]: 53).

Outside the university, the environment was extremely favourable to antiquity studies. This brought resources in the form of university posts with stable salaries from the ministry and student numbers (Ringer, 1967; Ruegg, 2004). As we shall see, this brought pressures as well. Since the eighteenth century, there was a lot of extra-academic enthusiasm for antiquity among artists and intellectuals, and later the emerging bourgeoisie. This enthusiasm itself was a transformation of the ways in which the classical heritage had been dealt with in Christian and renaissance traditions of learning: in the reception in Winckelman and German classicism, the classic authors were transformed from the source of timeless truths to an aesthetic ideal to be emulated.

This engagement with antiquity came to assume an important cultural and political weight in the German context. Culture and education (and within that education about antiquity) became very important to the emerging collective self-definition in the fragmented German territories. In an area of incipient nationalism, German intellectuals had chosen the Greeks in opposition to the Romans, which allowed for greater distance from Christianity and also matched an opposition between culture and civilization, which mapped on to an opposition between Germany on the one hand and France and Britain on the other hand, which suited the nationally oriented bourgeoisie in its opposition to the locally and internationally oriented aristocracy (Elias, 1969, see Camic, 1992).

In this context, discussions about antiquity became a site for discussions about the political future. The focus on the Greeks was a particular choice, which for example entailed not choosing a focus on the Jewish tradition (Marchand, 2003); it separated the Greeks unduly from their debts to its North African and Western Asian neighbours (Bernal, 1987). The choice was also anti-Christian; it did include conservative voices, but also hopes for a social and political renewal. Discussions about antiquity provided a space for the critique of prevailing political structures, a certain kind of establishment—though they were gradually incorporated into another kind of establishment. "Over the course of a century and more, German philhellenism moved from left, to liberal, to right, and from the fetish of young outsiders to the credo of aged academicians" (Marchand, 2003: 6).

The expansion of universities and education, and with that education in the classics, became central to the reform of and building of the Prussian State in particular after 1810. Particularly in protestant areas (Marchand, 2003; Rebenich, 2021: xiii), antiquity become central to the self-definition of the "Bildungsbuergertum", an

educated elite that stylised itself in opposition to born privilege (Kocka, 1995; Ringer, 1969). Humanistic secondary schools, which required a high number of hours of training in Latin and ancient Greek per week had the monopoly on providing access to higher education. The study of the antiquities was the dominant discipline shaping cultural ideas about science up until certainly the middle of the nineteenth century.

In this context, the scholars I study here defend the value of open-ended inquiry against pure admiration on the one hand, and against school-teaching on the other hand. The defense of these forms of scholarship as part of the “humanities” (Geisteswissenschaften) against the natural sciences began only from the 1860s (Hamann, 2014: 151). The recognition of the natural sciences in the secondary school system, resisted by classicists, began only in the 1870s (Rebenich, 2021: 36). Classicists were then under pressure from the natural sciences who contested their monopoly on the notion of *Bildung* (Hamann, 2014), from increasing demands to produce men with some practical skills and from an increasing emphasis on a “national” education focused on the German past (Rebenich, 2021: 124). Classicists were still in a strong position for engaging these new developments, having pioneered their own notion of collective research and having built up huge and well-funded projects, systematizing the collection of inscriptions, for example, and later a project on the border wall *Limes*. Even after 1871, scholar in these fields benefitted from increasing state funding for the sector as a whole in terms of university posts (Rebenich 2021).

The emergence of Greece as an object for cultural research

Scholarship of antiquity separates itself quite self-consciously from broader currents of philhellenism from the late eighteenth century onwards. It has to be noted that the separation of research from admiration remains entirely incomplete; the tension between admiration and scholarly examination is evident in the writings of authors in this foundational period and it recurs in the history of the discipline up until the present. But the explicit formulation of the scholarly side of the tension signals something new, which was to become influential and should not be taken for granted.

In a transformation of the classic legacy, ancient Greece changes first from a source of timeless truths to an admired ideal (in Johann Joachim Winckelman, for example). Then, in a separate step, it changed from an admired ideal to an object of study. Already as an ideal, ancient Greece was allowed to become “another” to some extent: church institutions of learning had historically favoured an approach to the classics, which posited a continuity of relevant reality and a continuity of relevant knowledge. By contrast, when antiquity was turned into an ideal to be emulated, its authors were recognised as being from another, and with that from a specific period and culture; the celebration entailed a certain kind of provincialization of ancient Greece that had not been possible before.

Humboldt is beginning to think of Greek antiquity as one possible object of study among many. In his 1793 text on the study of antiquity, Humboldt writes, “The study of man would gain most through the study and comparison of all nations, all countries and all times. But in addition to the immensity of this study, what matters

more is the degree of intensity with which one nation is studied as the extensity with which a large number of nations is studied. If it is thus advisable to halt at one or a couple; it is good to choose those, which somehow represent several others” (Humboldt, 2021a [1793]: 94).

He also notes, “The study of man in general, which we have discussed so far, using the character of a single nation from the monuments they left us is possible with each nation to some extent, but to a greater degree with some or the other.” (Humboldt, 2021a [1793]: 92–93). For Humboldt, suitability depends on the sources that have been left and a culture’s “variety and unity”, the ability to receive stimuli from the outside and unite a range of cultural expressions.

In justifying a focus on Greece as a research object, Humboldt uses some of the same tropes that had been used to justify the aesthetic ideal—Winckelmann had praised Greek art as the least nationally specific. But this focus is now seen as a means towards a different end, “the study of man”. The problem is framed broadly in social scientific terms. It just happens that Greece is more suitable than others. In further developments in that direction, Greece can be said to transition to become the first case of what we might today call a culturally sensitive, constructivist social science, which would have been discussed as a form of ‘historicism’ then.

Humboldt finds it worth saying that the Greeks are a case among others. For Boeckh, this is already established: He asks “what is philology” in general and notes that “the old and the new are random for philology” (Boeckh, 1877 [1809–1865]: 6). Philology is only focused by accident on the ancient because the ancient needs more explication. In this context, where philology is associated with classic philology but also takes up the whole space, other philologies have to struggle to establish themselves: this is true of other ‘others’ but also applies to German philology (Wegmann, 1994).

We can see in this discussion some of the effects of the specific notion of culture, that is a shared premise of antiquity studies at the time. Cultures are understood as discrete, unified and bounded wholes, a notion that is often dated back to Herder (1744–1803) and that was to become important for the discipline of anthropology and other fields.⁵ This concept of culture is a reason for the neglect of links between ancient Greece and Egypt and a basis for comparative evaluative questions to arise, to which comparative prejudiced answers can be given (Bernal, 1987).

At the same time, the scholars discussed here try to get away from a notion that the Greeks are, from their perspective, “like us” or “ours.” Though this is in no way fully achieved,⁶ scholars under consideration move into this direction with some seriousness, partly because of their opposition to the school teachers. Culture is, among other things, a resource for the project of emancipating research from admiring reconstruction. It helps to create an object of inquiry that is broader than a specific artefact but

⁵ On the politically ambiguous consequences of this holism as a tool of both imperial rule and anti-colonial nationalism and the notion of respect for other cultures see Abu Lughood 1991, Parekh 1995. For theoretical responses see also e.g. Merry 2003.

⁶ Humboldt’s ambivalence is expressed in the following comment on “our” lost Greek heritage: “If it is possible to lose something, which was never owned, but what one should have had as a right” (Humboldt 2021b, 114).

also somewhat separate from the cultural needs of the present. The notion of culture also helps to create an object of inquiry that is allowed some integrity vis-à-vis the superimposition of evolutionary schemas of interpretation. When we compare the work of these scholars to other nineteenth century theoretisation of societal development as proceeding in stages – central to “sociologists” like Comte and Spencer –, we can note that classicists’ discussion and justification of Greece presupposes historicism in some way – in recognising the Greeks as another, in framing an open curiosity about the period and place, in the recognition of the difficulty in accessing the past in Wolf—but does not embrace its developmentalist version.

The nineteenth century notion of *Bildung* has been widely discussed in its origins and implications (Fiedler, 1972, Hamann, 2011, 2014, Horlacher, 2015). I would note here that we can distinguish between two slightly different versions of the ideal of “*Bildung*” associated with neo-humanism, both of which can be linked to Humboldt: one version emphasizes that an individual personality and a collective culture is helped in its development by engaging with the best of previous cultural production (Wegmann, 1994). Another emphasizes that an individual personality and a collective culture is helped in its development by developing critical self-awareness by looking at a different culture, which was to become the anthropological and to some extent the sociological notion of *Bildung*.

Cultural research as knowledge of the known: August Boeckh

Humboldt was a polymath and an administrator, Wolf a transitional figure. The full disciplinary programme for antiquity studies emerged later and is closely associated with August Boeckh. August Boeckh was born in 1785, began studying in 1803 and began teaching in 1807. He was a student of Friedrich Wolff (born 1759), who was a student (though disgruntled) of Christian Gottlob Heyne (born 1729).

Younger than Humboldt, Hegel, and Schleiermacher, with whom he studied, much younger than Herder, Boeckh was well-positioned to put their programmes into practice and take them forward in a specific field. His contemporaries are Welcker (born 1784), Bekker (born 1785), Schultze (born 1786) and Hermann (born 1772). Mueller (born 1797), notable for his explicit racism and admiration of the military asceticism attributed to Sparta, was a student, as was Droysen (born 1808), also important for history as a discipline, and Dilthey (born 1833).

Boeckh was appointed as a professor of rhetoric and classical literature—his first works were editions of the poet Pindar (fifth century BC) and a work on metrics in Pindar—studies that paid attention to detailed questions about specific elements of literary form. He was involved in one of the first large-scale funded projects that came to be an important part of the humanities in Germany in the nineteenth century – an edition of epigraphic sources sorted by place of origin, the *Corpus Inscriptionum Graecarum*.

But he also contributed studies in economic history and research on ancient weights and measures and had a programmatic vision of the discipline as the central part of a more general philology. His programmatic writings appeared based on lectures after his death.

In the terms of a controversy with Hermann, Boeckh was associated with a “Sachphilologie” (“philology of things”) in pursuit of broader aims of studying a culture in its different aspects in contrast to Hermann’s more narrow “Wortphilologie” (“philology of words”) (see Ugolini, 2022; Vogt, 2013). Though Sachphilologie was coined as a hostile term by Herrman, Boeckh held his own, critiquing the gros of antiquities research because he saw it as limiting itself to the “most trivial research on language, which is hardly focused even on words but rather on syllables and letters” (Boeckh, 1851 [1817] xix).

Boeckh made explicit and programmatic a shift in the purpose of reading sources, which can be said to be the basis of modern cultural research: the point in reading, say Plato, was not to engage in a dialogue about truth but to make Plato’s worldview an object of analysis. We should not philosophise like Plato but engage in the history of philosophy. When reading Plato, the point was not to gain conceptual knowledge of the universe but rather the “knowledge of the known”, the “Erkennen des Erkannten” (Boeckh, 1877 [1809–1865: 10]). This historicist position constitutes an important shift, which anticipates the broadly constructivist sociology of art, religion and knowledge.

Sanjav Seth has commented on what he sees as the tendency in western scholarship to construct a western tradition of eternal co-presence and read authors like Aristotle or Aquinas “as if they were interlocutors (Seth & Neves, 2016: 17)”, but this is not what we observe here: This option is explicitly addressed and rejected by Boeckh as no longer possible; we find here an objectivation of antiquity, which makes a different understanding possible.

Boeckh developed a notion of critique as “Einordnung”, or “critical sorting”. In contrast to Dilthey’s later position, which was to become influential also in sociology, the aim was not only to understand, but to understand and then to bring into dialogue with what is already known. This is close to the sociological and anthropological notion of *Bildung* discussed above. As Horstmann notes, Boeck’s idea “that all research proceeds in a circle of conceptual construction und its empirical and historical examination and assessment” was ahead of its time (Horstmann, 1997: 34).

What makes a Science?

In establishing studies of antiquity as an academic discipline, Wolf, Boeckh and others distinguish it from other, related pursuits. What sources of authority does it draw on? On what terms is the specificity of their practice established? What is it separated from? These projects of boundary-drawing are relevant even if they are not always consistent or successful.

It is important to these authors to establish antiquity studies as a “wissenschaft” and to specify what is necessary to be able to claim this label. *Wissenschaft* is often translated as science; in light of the English meaning of “science” as “natural science”, and in light of later debates about the relationship between the humanities and social sciences on the one hand to the natural sciences on the other hand, it is very tempting to read Wolf and others as trying to establish antiquity studies as a science like the natural sciences in contrast to some other academic pursuits.

Jay Bolter presents this interpretation of Wolf's *Darstellung* in an interesting article. Bolter discusses at some lengths that it is not possible to undertake experiments in antiquity studies, and suggests that Wolf proposes specific ways of working with sources to make up for this (Bolter, 1980: 93/94). Bolter notes "He [Wolf] was trying to do for the study of classics what Hume tried to do for psychology, Smith for economics, Voltaire for history: to make the study into a science in accord with his conception of the physical sciences of his day" (Bolter, 1980: 92).

It is important to note, however, that Wolf himself does not reference experimental methods; indeed Bolter's framing of Wolf's project in "*Darstellung*" is a case study of a reader who imposes assumptions of the dominance of the natural sciences from later periods onto the turn of the nineteenth century.

As noted, the German term "wissenschaft" is one that to its users then and today includes the natural sciences, the social sciences and the humanities on equal terms. As discussed, Wolf biographically had had to defend philology against law and theology, not against the natural sciences. By the time of the *Darstellung*, he seems relaxed about the place of philology in the university. Wolf is aware of advances in the natural sciences—he writes about the "exact sciences", referencing mathematics more than physics—but if he sees these advances as a challenge that he might have to respond to, it is because they are a challenge to Aristotle and Plato, and by implication to the discipline of classics that cares for the texts handed down from Aristotle and Plato. Wolf is very aware (but finds it worth mentioning) that the natural sciences had overtaken the ancient sciences, which means he distances himself from those who read "his" sources for the substantive insights ("Sachkenntnisse"), which they might provide. The surpassing of ancient knowledge -which the church would have fought not too long before this time—allows him to ask in a new way: "Why read Latin?" It frees him up to answer it in ways that are much more clearly non-utilitarian. It frees the study of Greek and Latin from the central but subordinated role as an auxiliary science so that it can become a field of inquiry in its own right, the object of which is, as we have said, national culture.

As Wolf and others attempt to establish antiquity studies as a science, the relevant opponents are not natural scientists. Rather the discipline is established as a specialised practice against lay knowledge among amateurs and rote application in school teaching (Wolf, 1833 [1807], Bolter 1980).

It is very important to Humboldt that universities, the proper site of science, are very different from schools. Science should be pursued as an end in itself. Arguing against enlightenment utilitarianism and active state interference, Humboldt writes of the pursuit of "thought for thought's sake." If thought is used for ends outside itself, "the spirit of science is not alive" (Humboldt, 2008[1814]: 920). Boeckh was to write later, citing Aristotle, "The purpose of science ... is knowledge itself." Boeckh, 1877 [1809–1865] 25).

Classicists claim this label of science for themselves quite naturally; they do not seek legitimacy from or against the natural sciences. Scholars distinguish their practice as science from art but the emphasis is not on the closeness to the natural sciences but on the distinction from art, or more precisely from the aestheticizing, idealising reconstruction that was the heritage of Winckelmann and philhellenism more broadly.

The discipline is established in a moment of autonomization against cultural expectations. Research is defended as open-ended against the expectation of a demonstration of the greatness of the Greeks. In Wolf, there is a brief admonition to include the ugly and the trivial (Wolf, 1833 [1807] 828/ 850 32). Boeckh notes repeatedly that the Greeks were not perfect: They were “more unhappy than most believe” (Boeckh, 1851 [1817]: 792). He notes that while some things were better among the Greeks than in his time, other things were worse (Boeckh, 1851 [1817]: 15). He wants to discuss the “reverse side” (Boeckh, 1851 [1817]: 15). “I took aim at the truth and I don’t regret when the unconditional worshiping of the ancients has to be tempered because it emerges that where they touch gold, their hands were also dirty. Or shall the stories of the past be written only to create enthusiasm among the young? Shall the classicist hide that then as now everything was imperfect?” (Boeckh, 1851 [1817]: 2).

Boeckh does not discuss objectivity much, but he is concerned with truth. “Truth” is not opposed to subjectivity, or individual interpretation or judgement, but to the pressure to idealise the Greeks due to the cultural weight they were accorded. Boeckh positions the production of truth against “worship” (Boeckh, 1851 [1817]: 2), “one-sidedness” (“Einseitigkeit,” Boeckh, 1851 [1817]: 791), “superficiality” (“Oberflächlichkeit,” Boeckh, 1851 [1817]: 791), and “interestedness,” “bias,” or “reverence” (“Befangeneheit,” Boeckh, 1851 [1817] 25).

The distance to worship is not wholly established in Humboldt’s writings or even in Boeckh’s. Boeckh notes that because antiquity is in the past “impartial judgement” is easier; he also notes on the same page that the Greeks have created “the most noble of what man has created” (Boeckh, 1877 [1809–1865] 35). Boeckh’s professed admiration of “the ancients” in writing at times reads almost like an attempt to connect to readers, an obligatory concession to the popular opinion of the times. My claim here is not that scientificity was achieved, but that as an ideal it was defined in tension with these cultural tropes.

The distance of cultural research from worship had to be won again and again after, or rather, the act or move of distancing from it, recurs in later moments. Spranger, for example, makes the pro-science point again in 1909 (“Who wants to bear responsibility to show us a dressed up antiquity instead of the one that objective research has revealed thus far?”) (Spranger 1909, cited in Hamann, 2014: 183). It is also under explicit attack, for example, later from Nietzsche who was to complain that the scholar-philologist has replaced the “poet philologist (Nietzsche, 1954 [1874/75]). He criticises the neglect of other cultures but at the same time bemoans that antiquity has become a period like any other and is no longer a model. His polemic against scholarship is in the name of heroic, great art and creation.

Conclusion

In the early nineteenth century, scholars like Wolf, Humboldt and Boeckh developed an idea of empirical cultural research as an open-ended activity, to be pursued for its own sake, which was new at the time and has influenced traditions

of the research university that we can tend to take for granted today. Antiquity studies at the time was the central discipline of the humanities and played a central cultural role overall.

The humanities in this moment were established as a science, not against the natural sciences, but against cultural expectations that would have subordinated research to the demands of a moral role for the emerging Germany. The idealization of the Greeks that was expected would have initially put scholars against and later in line with established political institutions (Marchand, 2003:6).

Based on 20th century cases, sociologists have discussed established cultural fields primarily as in opposition to the bureaucratic state and to market forces. This has led to two-dimensional maps that oppose field-specific cultural capital on the one hand to economic and political capital on the other hand (e.g. Bourdieu, 1993). For sociology, for example, field-theoretical accounts see an opposition between autonomous and critical work on the one hand and quantitative work sponsored by the state on the other hand (Steinmetz, 2007, 2014).

Antiquity studies' insistence on scientificity is not easily assimilated into this opposition which also shapes contemporary debates. The case under discussion highlights other possible forms of heteronomy: the autonomy that was sought and precariously established by these scholars was an autonomy for research practices against cultural expectations and moral pressures.

Further research could explore the history of research in the context of its "others" in different national, historical and disciplinary contexts. It is the specificity of research as a practice that can get lost when we treat figures of intellectual history only as individual thinkers, whose writings can be regarded as "content", who are perhaps taught as "theory" and examined with regard to intellectual or political positions. It can also be obscured by a focus on content and positions in contemporary debates between opposing camps in social and cultural research and in contemporary debates about the role of the university.

Consideration of the first half of the nineteenth century in Germany may help us understand the periods that follow and, by implication, the present in a new light. It is clear, for example, that our understanding of Nietzsche can be enhanced by considering his fraught relationship to the academic discipline of classics (which he was trained in and which he was hired to teach at the University of Basel).

Tracing the discussions presented here further forward in time might also afford new perspectives on the Methodenstreit among German and Austrian economists, which has profoundly shaped sociology's own discussion of scientificity (Knorr Cetina, 1981). Understanding of the Methodenstreit in contemporary sociology have been influenced by debates about science after the second world war, particularly but of course not only in Germany and the US (Adorno, 1976; Calhoun & Vanantwerpen, 2007; Hirschauer, 2018; Steinmetz, 2004, 2005). Starting from an understanding of the period preceding that debate can help correct this and can help us make new sense also of the positions taken by Max Weber, who was engaged with classical antiquity and responded to debates about the legacy of historicism.

As sociology is open to historical data and has long ceased to define itself as the study of its own national context, the authors discussed can be seen as much as a part of the pre-history of sociology as August Comte and Herbert Spencer. The programme most explicitly formulated in Boeckh with its combination of interpretation, critique and classification provides a distinctive waypoint for cultural research that has been obscured by later authors claiming the hermeneutic tradition in strong opposition to the natural sciences.

Declarations

Conflict of interest The author declares that she has no conflict of interest.

Open Access This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>.

References

- Abu-Lughood, L. (1991). Writing Against Culture. In R.G.Fox (Ed.), *Recapturing anthropology: working in the present* (137–162). School of American Research Press.
- Adorno, T. W. (Ed.). (1976). *The Positivist Dispute in German Sociology*, trans. Harper & Row.
- Alexander, J.C. (1987). *Twenty Lectures. Sociological Theory Since World War 2*. Columbia University Press.
- Alexander, J. C. (2008). Clifford Geertz and the Strong Program: The Human Sciences and Cultural Sociology. *Cultural Sociology*, 2(2), 157–168.
- Benson, R. (1999). Field Theory in Comparative Context: A New Paradigm for Media Studies. *Theory and Society*, 28(3), 463–498.
- Benson, R. (2005). Mapping Field Variation: Journalism in France and the United States. In R. Benson & E. Neveu (Eds.), *Bourdieu and the Journalistic Field* (pp. 85–112). Polity Press.
- Bernal, M. (1987). *Black Athena: The Afroasiatic Roots of Classical Civilization. Vol. 1: The Fabrication of Ancient Greece, 1785–1985*. Free Association Press.
- Biagioli, M. (1996). From Relativism to Contingentism. In P. Galison and D.J.Stump (Eds.), *The Disunity of Science: Boundaries, Contexts and Power* (189–206). Stanford University Press.
- Boeckh, A. (1877 [1809-1865]). *Encyklopädie und Methodologie der philologischen Wissenschaften*. Teubner.
- Boeckh, A. (1851 [1817]). *Die Staatshaushaltung der Athener*. G. Reimer.
- Bolter, J. (1980). Friedrich August Wolf and the Scientific Study of Antiquity. *Greek, Roman and Byzantine Studies*, 21, 83–99.
- Bordo, S. (1987). *The Flight to Objectivity: Essays on Cartesianism and Culture*. SUNY Press.
- Bourdieu, P. (1975). The Specificity of the Scientific Field and the Social Conditions of the Progress of Reason. *Social Science Information*, 14, 19–47.
- Bourdieu, P. (1990). *Homo Academicus*. Stanford University Press.
- Bourdieu, P. (1994). Rethinking the State: Genesis and Structure of the Bureaucratic Field. *Sociological Theory*, 12(1), 1–18.
- Bourdieu, P. (1996). *The Rules of Art*. Stanford University Press.

- Bourdieu, P. (1993). *The Field of Cultural Production: Essays on Art and Literature*. Columbia University Press.
- Calhoun, C., & VanAntwerpen, J. (2007). Orthodoxy, Heterodoxy, and Hierarchy: 'Mainstream' Sociology and Its Challengers. In C. Calhoun (Ed.), *Sociology in America: A History* (pp. 367–411). University of Chicago Press.
- Camic, C. (1992). Reputation and Predecessor Selection – Parsons and the Institutionalists. *American Sociological Review*, 57(4), 421–445.
- Clark, W. (2006). *Academic Charisma and the Origins of the Research University*. University of Chicago Press.
- Creager, A. N. H., Lunbeck, E., & Wise, M. N. (Eds.). (2007). *Science without laws: Model systems, cases*. Duke University Press.
- Daston, L. (1992). Objectivity and the Escape from Perspective. *Social Studies of Science*, 22(4), 597–618.
- Daston, L. (2019). Objektivität und Unparteilichkeit: Epistemische Tugenden in den Geisteswissenschaften. In A. Gelhard, R. Hackler, & S. Zanetti (Eds.), *Epistemische Tugenden: Zur Geschichte und Gegenwart eines Konzepts* (pp. 201–216). Mohr Siebeck.
- Daston, L., & Most, G. W. (2015). History of Science and History of Philologies. *Isis*, 106, 2.
- Dilthey, W. (1989 [1883]). *Introduction to the human sciences*. Princeton University Press.
- Elias, N. (1969). *The Civilizing Process* (Vol. I). Blackwell.
- Fiedler, R. (1972). *Die klassische deutsche Bildungsidee*. Beltz Weinheim.
- Fligstein, N. (2001). Social Skill and the Theory of Fields. *Sociological Theory*, 19, 105–125.
- Fox-Keller, E. (1985). *Reflections on Gender and Science*. Yale University Press.
- Galison, P., & Daston, L. (2010). *Objectivity*. Princeton University Press.
- Galison, P., & Stump, D. J. (1996). *The Disunity of Science*. Stanford University Press.
- Geertz, C. (1983). *Local Knowledge. Further Essays in Interpretative Anthropology*. Basic Books.
- Gieryn, T. F. (1999). *Cultural Boundaries of Science: Credibility on the Line*. Chicago University Press.
- Grafton, A. (1981). Prolegomena to Friedrich August Wolf. *Journal of the Warburg and Courtauld Institutes*, 44, 101–129.
- Grafton, A. (1983). Polyhistor into Philolog: Notes on the Transformation of German Classical Scholarship, 1780–1850. *History of Universities*, 3, 159–192.
- Guetzkow, J., Lamont, M., & Mallard, G. (2004). What is Originality in the Humanities and the Social Sciences? *American Sociological Review*, 69(2), 202.
- Guthenke, C. (2020). *Feeling and Classical Philology. Knowing Antiquity in German Scholarship, 1770–1920*. Cambridge University Press.
- Hamann, J. (2014). *Die Bildung der Geisteswissenschaften. Zur Genese einer sozialen Konstruktion zwischen Diskurs und Feld*. UVK.
- Hamann, J. (2011). Bildung in German human sciences: The discursive transformation of a concept. *History of the Human Sciences*, 24(5), 48–72.
- Harloe, K. (2013). *Winckelmann and the Invention of Antiquity: History and Aesthetics in the Age of Altertumswissenschaft*. Oxford University Press.
- Herder, J. G. (1969 [1772]). Treatise on the Origin of Language. In F.M. Barnard (Ed.) *J.G. Herder on Social and Political Culture*. Cambridge University Press.
- Hirschauer, S. (2018). Der Quexit. Das Mannemer Milieu im Abseits der Soziologie. *Zeitschrift Für Theoretische Soziologie*, 7, 153–167.
- Horlacher, R. (2015). *The Educated Subject and the German Concept of Bildung*. Routledge.
- Horstmann, A. (1997). *Wozu Geisteswissenschaften?* Humboldt Universität zu Berlin.
- Humboldt, W. von. (2008 [1814]). Ueber die Bedingungen, unter denen Wissenschaft und Kunst in einem Volke gedeihen, In W. von Humboldt (Ed.) *Schriften zur Sprache* (916–921). Wunderkammer Verlag.
- Humboldt, W. von (2021a [1793]). Ueber das Studium des Altertums und des griechischen insbesondere. In W. Humboldt (Ed.) *Schriften zur Geschichtstheorie* (84–114). Reklam: Ditzingen.
- Humboldt, W. von (2021b [1793]). Ueber den Charakter der Griechen, die idealische und historische Ansicht desselben. In W. Humboldt (Ed.) *Schriften zur Geschichtstheorie* (114–123). Reklam: Ditzingen.
- Kaldewey, D. (2013). *Wahrheit und Nützlichkeit. Selbstbeschreibungen der Wissenschaft zwischen Autonomie und gesellschaftlicher Relevanz*. Transcript.
- Knorr Cetina, K. (1981). Social and Scientific Method or What Do We Make of the Distinction Between the Natural and the Social Sciences? *Philosophy of the Social Sciences*, 11, 335–359.

- Knorr Cetina, K. (1991). Epistemic Cultures: Forms of Reason in Science. *History of Political Economy*, 23(1), 105–122.
- Knorr Cetina, K. (1999). *Epistemic Cultures*. Harvard University Press.
- Kocka, J. (1995). The middle classes in Europe. *The Journal of Modern History*, 67(4), 783–806.
- Kohler, R. E. (2019). *Inside Science. Stories from the Field in Human and Animal Science*. University of Chicago Press.
- Krause, M. (2014). *The Good Project*. Chicago University Press.
- Krause, M. (2018). How Fields Vary. *British Journal of Sociology*, 69(1), 3–22.
- Krause, M. (2021). *Model cases*. Chicago University Press.
- Lamont, M. (2009). *How Professors Think: Inside the Curious World of Academic Judgment*. Harvard University Press.
- Lanza, D. & G. Ugolini (Eds.). (2022). *History of Classical Philology: From Bentley to the 20th century*. De Gruyter.
- Levine, E. (2021). Allies and rivals. In *German-American exchange and the rise of the modern research university*. Chicago University Press.
- Mallard, G. (2015). Interpreters of the Literary Canon and their Technical Instruments: The Case of Balzac Criticism. *American Sociological Review*, 70(6), 992–1010.
- Marchand, S. L. (2003). *Down from Olympus: Archaeology and philhellenism in Germany, 1750–1970*. Princeton University Press.
- Marchand, S.L. (2009). *German orientalism in the age of empire. Religion, race, and scholarship*. Cambridge University Press.
- Merry, S. E. (2003). Human rights law and the demonization of culture (and anthropology along the way). *Political and Legal Anthropology Review*, 26(1), 55–76.
- Momigliano, A. (1950). Ancient History and the Antiquarian. *Journal of the Warburg and Courtauld Institutes*, 13(43/4), 285–315.
- Momigliano, A. (1982). New Paths of Classicism in the Nineteenth Century. *History and Theory* 21 (4).
- Murphy, K., & Traninger, A. (Eds.) (2014). The emergence of impartiality. *Intersections*:31.
- Nietzsche, F. (1954 [1875]) *Wir Philologen*. In F. Nietzsche: *Werke in drei Bänden Band 3*, (323–332). Carl Hanser.
- Parekh, B. (1995). Liberalism and colonialism: A critique of Locke and Mill. In B. Parekh & J. N. Pieterse (Eds.), *Decolonisation of imagination. Culture, knowledge and power* (pp. 81–98). Zed Books.
- Rebenich, S. (2021). *Die Deutschen und ihre Antike. Eine wechselvolle Beziehung*. Klett Cotta.
- Rickman, P. (1979). *Dilthey*. University of California Press.
- Riedel, M. (1996). Die Erfindung des Philologen, Friedrich August Wolf und Friedrich Nietzsche. *Antike Und Abendland*, 42(1), 119–136.
- Ringer, F. K. (1967). Higher Education in Germany in the Nineteenth Century. *Journal of Contemporary History*, 2(3), 123–138.
- Ringer, F. (1969). The decline of the German mandarins. In *The German academic community 1890–1933*. Harvard University Press.
- Ruegg, W. (2004). *A history in the university of Europe*. Cambridge University Press.
- Schelling, F. W. J. (2016 [1803]) *Vorlesung über die Methode des akademischen Studiums*. Holzinger.
- Schelsky, H. (1971). *Einsamkeit und Freiheit*. Idee und Gestalt der deutschen Universitaet und Ihrer Reformen.
- Schleiermacher, F. (1956 [1808]). Gelegentliche Gedanken über Universitäten im deutschen Sinn nebst einem Anhang über neu zu errichtende. In E. Anrich (Ed.). *Die Idee der deutschen Universität. Die fünf Grundschriften aus der Zeit ihrer Neubegründung durch klassischen Idealismus und romantischen Realismus* (219–293). Wissenschaftliche Buchgesellschaft.
- Seth, S., & Neves, J. (2016). A conversation with Sanjay Seth on the Code of History, Post-colonialism and Marxism. Interview by José Neves. *Práticas Da História*, 3, 125–149.
- Seth, S. (2020). *Beyond Reason: Postcolonial Theory and the Social Sciences*. Oxford University Press.
- Spoerhase, C., & Dehrmann, M. G. (2011). Die Idee der Universität: Friedrich August Wolf und die Praxis des Seminars. *Zeitschrift Für Ideengeschichte*, 1, 105–117.
- Spoerhase, C. (2015). Seminar versus Mooc. *New Left Review*, 96(6), 77–82.
- Spoerhase, C. (2019). Seminar Libraries as Laboratories of Philology: The Modern Seminar Model in Nineteenth-Century German Philology. *History of Humanities*, 4, 103–123.
- Spranger, E. (1909). *Wilhelm von Humboldt und die Humanitätsidee*. von Reuther & Reichard.
- Steinmetz, G. (2004). Odious Comparison. Incommensurability, the Case Study and Small Ns in Sociology. *Sociological Theory*, 22(3), 371–400.

- Steinmetz, G. (2005). Positivism and its others in the social sciences. In George Steinmetz (Ed.): *The Politics of Method* (1–59). Duke University Press.
- Steinmetz, G. (2007). American Sociology before and after World War Two: The (Temporary) Settling of a Disciplinary Field. In C. Calhoun (Ed). *Sociology in America. The ASA Centennial History* (314–366). University of Chicago Press.
- Steinmetz, G. (2014). Scientific Autonomy and Empire, 1880–1945: Four German Sociologists. In B. Naranch & G. Eley (Eds.), *German Colonialism in a Global Age* (pp. 46–73). Duke University Press.
- Trueper, H. (2020). *Orientalism, Philology, and the Illegibility of the Modern World*. Bloomsbury Academic.
- Turner R.S. (1981). The Prussian Universities and the Concept of Research. In H.N.Jahnke & M. Otte (Eds.) *Epistemological and Social Problems of the Sciences in the Early Nineteenth Century* (109–181). Springer.
- Turner, R. S. (1983). Historicism, Kritik, and the Prussian Professoriate, 1790–1840. In M. Bollack & H. Wismann (Eds.), *Philologie et herméneutique au 19e siècle* (pp. 450–489). Vanden Hoek & Ruprecht.
- Ugolini, G. (2022). Hermann contra Boeckh: Formal Philology and Historical Philology. In D. Lanza & G. Ugolini (Eds.), *History of Classical Philology: From Bentley to the 20th century* (pp. 133–163). De Gruyter.
- Vogt, E. (2013). "Der Methodenstreit zwischen Hermann und Böckh und seine Bedeutung für die Geschichte der Philologie". In E. Vogt. *Literatur der Antike und Philologie der Neuzeit: Ausgewählte Schriften* (299–316). De Gruyter.
- Wegmann, N. (1994). Was heisst einen klassischen Text lesen? Philologische Selbstreflexion zwischen Wissenschaft und Bildung. In J. Fohrmann & W. Voßkamp (Eds.) *Wissenschaftsgeschichte der Germanistik im 19. Jahrhundert* (334–450). Metzler.
- Wolf, F. A. (1833 [1807]). *Darstellung der Alterthumswissenschaft, nebst einer Auswahl seiner kleinen Schriften: Und literarischen Zugaben zu dessen Vorlesungen über die Alterthumswissenschaft*. Lehnhold.
- Wolf, F. A. (1985). *[1795] Prolegomena to Homer*. Princeton University Press.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Monika Krause is a Professor of Sociology at the London School of Economics. She is the author of "Model Cases. On Canonical Research Objects and Sites" (Chicago University Press, 2021).