To a very large degree, academic freedom as we know it today is based on the way it was conceived in Germany during the 19th century. At that time, it was not only professors who were in a position to make independent decisions about their research topics; students, too, enjoyed freedoms that seem incredible from today’s perspective. Lorraine Daston from the Max Planck Institute for the History of Science in Berlin has studied the development of academic freedom and its limitations.

Three facts must be kept in mind in any discussion of academic freedom as both ideal and practice. First, in long-term historical and cross-cultural perspective, there have been relatively few societies that have recognized intellectual inquiry for its own sake as either a value or as an activity worthy of sustained support. And among those exceptional societies that have made such normative, institutional, and financial commitments, all have set boundaries to unfettered curiosity. In the medieval European university, those boundaries invoked religious orthodoxy (as in the case of the 1277 Paris condemnation of certain Aristotelian doctrines such as the eternity of the world); in many modern societies, limits are drawn with respect to experiments on humans (and increasingly also some animal species) that inflict extreme pain or risk life and limb. Calls for imposing limits can also come from within the research community, as in the case of the recent appeal for a temporary moratorium on heritable genome editing by prominent scientists in that field. Academic freedom is both a rare and restricted value.

ECONOMISTS REFUSED TO DOCTOR STATISTICS

Second, both the meanings and justifications of academic freedom have varied not only by time and place but even in the same time and place. Much depends on what the defenders of academic freedom perceive to be the greatest threat to its exercise in a particular context. Even if we restrict ourselves to the present and to societies with roughly similar academic institutions, there is considerable variability on this point. Many Indian scholars and scientists protest censorship, legal suits, and threats of violence by Hindu activists against historians who cite archaeological evidence that Hindus once ate beef or who dispute claims (made by, among others, the Prime Minister Narendra Modi) that in Vedic times genetic science and airplanes already existed in India. In this context, religious extremism tinged with chauvinism poses the clear-and-present danger to academic freedom.

In contrast, economists and statisticians in Argentina who refused to massage official inflation statistics to match the ruling party’s rosy election...
Financial and moral. The financial part is obvious, especially in an age of huge-expensive instruments such as the Large Hadron Collider in Geneva or the European Southern Observatory in the Chilean desert. But moral support is even more important: unless a society subscribes to the intrinsic value of free intellectual inquiry, there will be little motivation for its best and brightest members to devote their talents and energies to such demanding, uncertain, and comparatively ill-paid pursuits. In this sense, even those few researchers bankrolled by their own private fortunes are dependent.

However, dependence need not imply the absence of autonomy, defined in this context as the freedom of an academic body to decide on membership, governance, and, above all, the quality of scholarship and science. Autonomy as self-governance can apply to individuals (e.g. with respect to the choice of a topic of research), but its primary focus is institutional. From the libertas scholastica of the medieval university to the 2004 declaration on academic freedom and the research university by the University of California system, the ideal of academic autonomy as self-governance, however often it has been violated by the powers-that-be in practice, runs like a scarlet thread through the long and labyrinthine history of academic freedom.

Restrictions, diversity, and autonomy still characterize modern ideals and practices of academic freedom, especially if viewed from a global perspective.

**FOCUS Freedom**

**History in view:** Lorraine Daston has spent 24 years as the Director of the Max Planck Institute for the History of Science, with her research focusing on the development of probability and statistics, the history of objectivity in science and the moral authority of nature, among other areas.

Third, there is an important distinction between independence and autonomy that is often overlooked in debates about academic freedom. Intellectual inquiry, particularly but not exclusively in the modern empirical sciences, is almost never independent. Scholars and scientists have depended (and still depend) on the support of organized religion, governments, universities, industry, private patrons, and above all the culture at-large to do research, whether in the library or the laboratory or the field. This support is both financial and moral. The financial part is obvious, especially in an age of huge-expensive instruments such as the Large Hadron Collider in Geneva or the European Southern Observatory in the Chilean desert. But moral support is even more important: unless a society subscribes to the intrinsic value of free intellectual inquiry, there will be little motivation for its best and brightest members to devote their talents and energies to such demanding, uncertain, and comparatively ill-paid pursuits. In this sense, even those few researchers bankrolled by their own private fortunes are dependent.

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they returned to their home countries. Almost half of the members of the committee of the American Association of University Professors that drafted the United States’ first declaration of academic freedom in 1915 were graduates of German universities.

STUDENTS COULD CHANGE THEIR UNIVERSITY

Because the German model of academic freedom is so intimately associated with the Humboldtian university, particularly its aspiration to combine teaching and research, Wilhelm von Humboldt’s own statements concerning academic freedom are often cited as the crystallization of this ideal, although his fragmentary writings on this topic were not published until long after his death and therefore played little role in practice. More representative of how these ideals were actually realized in German universities during the late nineteenth century is Hermann von Helmholtz’s 1877 inaugural lecture as rector of the Friedrich-Wilhelm Uni-

The fame that drew students from many countries to study at German universities in the late nineteenth century also endowed the German model of academic freedom with enough prestige to allow foreign graduates of Berlin, Leipzig, Heidelberg, and elsewhere to campaign for similar freedoms when they returned to their home countries. Almost half of the members of the committee of the American Association of University Professors that drafted the United States’ first declaration of academic freedom in 1915 were graduates of German universities.

Free, but not unlimited: Article 5 of German Basic Law safeguards academic freedom but also obligates the scientific community to abide by the constitution and therefore also to uphold human dignity.
A protest in vain: in February 2019, demonstrators gathered in Budapest to protest against the planned restructuring of the Hungarian Academy of Sciences. The government has now taken control of the Academy.

Helmholtz, whose worldwide eminence as both physiologist and physicist lent him the authority to speak for German science as a whole, laid out a vision that was certainly remote from the *libertas scholastica* of the medieval universities but also divergent in key points from late 20th and early 21st century views of academic freedom. The *libertas scholastica* had been primarily concerned with the legal privileges of members of the university, both students and teachers, e.g. the right to be tried in special courts, to adjudicate academic disputes, to move freely from one university to another, to work on Sundays and holidays, and even to evict noisy neighbors who disturbed a professor’s peace and quiet.

Current notions of academic freedom focus almost entirely on the rights of professors to teach and research whatever they (or their disciplinary community) deem to promote the growth of knowledge, even on controversial topics, and seldom discuss the rights of students. In contrast, Helmholtz upheld the freedom of both students and docents in almost equal measure, *Lern- und Lehrfreiheit.*

**MORE FREEDOM THAN PARLIAMENTARIANS**

Helmholtz’s understanding of the freedom to learn would surprise a good many students at European, North American, and Asian universities nowadays, who are subject to increasingly strict and demanding curricular requirements. Aside from the exceptional case of students intending to make a career in a particular profession, such as law or medicine, and therefore subject to officially required and examinations, students were and ought to be completely free to visit whatever lectures they pleased – or none at all. Helmholtz explained that students may “seek their instruction to any extent they wish from books; it is indeed highly desirable that the works of the great men of the past constitute an essential part of their studies.”

Moreover, students were free to wander among all Germanophone universities, admittedly a contraction of the ambit of the Latinate medieval student, who could travel from Paris to Bologna to Oxford to Prague, if he so wished, but still permitting considerable geographic mobility in comparison to current regulations. Much to the astonishment of foreign visitors, who could not conceive of how one could “leave young men to themselves without the greatest damage,” – as Helmholtz noted – students were also free to comport themselves as they wished outside the university, short of outright criminality.

It was this training in responsibility and independence that Helmholtz praised as one of the university’s greatest gifts to the society that supported it: students who survived this test of character would be able to think for themselves. It was also the most difficult aspect of the German model of academic freedom to export, particularly to Anglophone countries with a collegiate model of student life (Great Britain) or a commitment to moral and religious education as well as to the doctrine of in loco parentis (the United States).

Helmholtz’s conception of the freedom of teaching, in contrast, makes for more familiar reading. Despite the name, freedom of teaching had already become freedom of research. University instructors were to be chosen chiefly on the basis of their ability to advance their branches of science and scholarship, not pedagogical talent (another aspect of the German university that took foreign visitors aback). In contrast to the limited political freedom en-
joyed even by parliamentarians, the freedom of the German professor to debate even the most extreme forms of materialism or Darwinian evolutionary theory or the most uncompromising defense of papal infallibility knew no bounds – so long as a controversial scientific question was discussed in a scientific manner.

Helmholtz acknowledged that such no-holds-barred disagreements among professors could lead to schisms in faculties but thought that the end effect would be to attract more, not fewer students. In any case, a certain amount of internecine strife among professors served as a healthy corrective to tendencies toward dogmatism and the establishment of scientific schools. What Helmholtz did not promise was the eventual convergence of scientific and scholarly views toward some single truth, much less a useful truth. His defense of academic freedom as the professor’s “free conviction” rather than doctrinal loyalty had an unmistakably Protestant ring to it: “In their innermost hearts our founders did not lose their trust in the power of freedom to correct the missteps of freedom and of more mature knowledge to correct the errors of the less mature. The same sensibility that threw off the yoke of the Roman church also organized the German university.”

Whatever the inspirational role of the German model of academic freedom, the variations on its themes imported to other countries were always adjusted to local circumstances. Cambridge and Oxford, Johns Hopkins University and the University of Chicago, all embraced the advanced seminar and the doctoral degree as qualifications to pursue independent research but never wholly abandoned moral missions or collegiate living or in loco parentis responsibilities, at least not at the undergraduate level. France managed to graft many of the German innovations onto its own distinctive system of universities and Grandes Écoles, simply adding a few more of the latter (e.g. the École Pratique des Hautes Études) to accommodate the new research imperatives.

COMMERCIALIZATION IS AGAIN CHANGING THE IDEAL

Even more significantly, each local ideal of academic freedom joined battle against a different adversary: in the French Troisième République, against Catholic orthodoxy; in the American Gilded Age, against the millionaire capitalists who served on the boards of trustees of private universities and the state legislatures that watched over public universities with a gimlet eye. In countries that have included guarantees of academic freedom in their statutes or constitutions, jurists and judges have in practice further modified the ideal and sharpened its limits. It is therefore not surprising to find a plethora of defenses of these different variants of academic freedom, from the instrumental (in the long run, academic freedom produces a useful pay-off for society, whether in the form of well-informed citizens or life-saving scientific breakthroughs or lucrative technology) to the ethical (academic freedom fosters “the culture of independence that we need in order to lead the kind of lives we should”, according to the legal philosopher Ronald Dworkin).

There is every reason to expect that the challenges of the twenty-first century, from steep increases in government regulation, commercialization, and the sheer number of researchers worldwide, will generate new versions and justifications of academic freedom, as well as new restrictions in tune with the times. The unfinished, adaptive, and exploratory nature of academic freedom chimes with what Wilhelm von Humboldt believed to be the fundamental value of scientific research to progressive societies: “[I]n the organization of higher scientific institutions, everything is based on holding fast to the principle that science and scholarship must be considered as not yet entirely discovered and never entirely to be discovered and always ceaselessly to be sought.”

www.mpg.de/podcasts/freiheit (in German)

SUMMARY

- Academic freedom is always subject to limitations such as those defined by religious or legal principles. Currently, however, it is also being restricted by religious extremism, new ideologies, ignorance and commercialization.
- Science is also dependent on the financial support and moral backing of the state and society.
- The German model of academic freedom, which was designed by Wilhelm von Humboldt during the 19th century, has been adopted by many other countries, albeit in a modified form.
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