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Always Relevant? Finding a Place for the Social Sciences in the Technical University and the Business School

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Abstract Relevance with regard to the social sciences can be presented as a new imposition from external stakeholders and an obligation imposed upon the individual researcher. As an alternative approach, we place relevance in a larger institutional but also historical perspective. Taking the case of two non-traditional locations for the social sciences, we suggest that 'relevance' has been actively constitutive of both institutions from the beginning—even if the definition and practice of relevance have been matters of discussion, change and contestation. In what we describe as a process of multi-layering, relevance has over time accumulated new meanings which can co-exist with older concerns. It follows that, even when universities express a commitment to relevance, the enactment of that commitment will be open to competing interpretations. Our account identifies an element of circularity as old issues return in new form. We also note that both the institutional past and organizational complexity can be overlooked within contemporary discussions. Relevance is not a static concept around which critical debate then circulates. Its contextuality, case-specificity and multi-dimensionality make it difficult to impose from above. Nevertheless, the shifting construction of its meaning and enactment provokes questions about the identity and purpose of both the social sciences and the universities.

Keywords Technical universities · Business schools · Relevance · Social sciences · University strategy

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Introduction[1]

Relevance has many meanings. In their introduction to this special issue, Brunet et al. distinguish four modes of relevance (Brunet et al. 2024). Relevance is also found, and performed, in many settings. Even within one country, separate research and educational institutions can approach relevance in distinctive ways. And even within the same institution, relevance may not be consistently defined and enacted.

In order to develop this discussion, we will adopt an institution-wide perspective on the changing meanings associated with relevance in two contexts. In what follows, our attention will not be on the researcher's experience of 'doing relevance' but rather on institutional strategy and purpose. This is not intended as a fine-grained study of life in an academic department (Sørensen and Traweek 2022). However, our account does draw upon an element of self-ethnography. As we will argue, 'relevance' needs to be understood in the wider setting of institutional direction and mission. Not all academic environments are the same. And the different aims and goals of academic institutions are likely to have consequences for the kinds of teaching and research that are conducted.

This discussion becomes all the more important given two significant tendencies within the contemporary treatment of relevance. The first is to imagine relevance as a *new requirement*, linked to the general commercialization or corporatization of the university (Busch 2014; Collini 2012; Huzzard et al. 2017; Merz and Biniok 2010). Here, it is often contrasted with the idea of free or curiosity-driven research—which is in turn interpreted as characteristic of some previous golden age. In the current climate, societal relevance is then linked to the rise of indicators, metrics and New Public Management as another external pressure on academic researchers (Parker 2014; Slaughter and Leslie 1997; Smyth 2017). Alternatively, we will suggest that, at least at the two universities considered here, relevance is not a new concern but has been important from the very beginning.

The other significant tendency within contemporary treatments of relevance is to treat this as an *individual rather than a collective matter* (Bandola-Gill 2019). The responsibility assumed by, or placed upon, the academic researcher is then to become an engaged—or impactful—scholar (Hoffman 2021; Pettigrew 2011; Van de Ven 2007). In contrast, the approach taken here is to consider the role played by academic institutions in framing relevance. Accordingly, we will offer a broader (and inevitably more sweeping) picture of larger institutional frameworks and shifting discussions about the aims and purpose of two universities.

In this account, we will focus especially on the position of the social sciences (for an early discussion, see Lindblom and Cohen 1979). More than that, we will consider the role of social science in the technical university and the business school. We have chosen these cases precisely because they are not the standard home of social science as found in the departments and faculties of more mainstream—or 'traditional'—universities. Rather, they are places where both the issue of relevance

[1] This paper is part of the special issue "Modes of Relevance in Research. Towards Understanding the Promises and Possibilities of Doing Relevance".

and the role of the social sciences have been explicitly questioned and, to a varying degree, reflected upon. This does not mean, however, that our discussion has no importance for more 'classical' social science environments where relevance may also not be a new concern. To offer an example from one of the UK's 'red brick' or civic universities, founded in the late nineteenth century, the official history of the University of Liverpool suggests that its Department of Social Science 'had its origins not in academic research but in the practical needs of training for social work' (Kelly 1981: 143). It would not be hard to find other examples of academic institutions which now promote their world-class research excellence but similarly have their origins in more practical, often societally-oriented, concerns.

Both of our chosen cases started life as 'højskoler' (the Danish equivalent of the German Hochschule or vocational university). For both institutions also, whilst relevance has been central to academic development, the practical definition of relevance has not been fixed or unchanging. To put this in the form of two closely-related questions: *how has the meaning of relevance changed over time in two academic settings? And what can we learn from these cases about the relationship between social science and relevance?*

Relevance in Context

Fortunately, in considering both the shifting meanings of relevance in an academic setting and the particular position of the social sciences, there is a significant body of research on which we can draw. One important strand is represented by the expanding literature within Science & Technology Studies (STS) that specifically examines the university as an institution—and the consequences of this for academic work (Müller 2024). In an early contribution, Hackett (1990) explored the relationship between the organizational culture of the university and knowledge practices. More recently, Fochler and de Rijcke have initiated a discussion of the mixed experiences of academic life caught up in what they term the 'indicator game' (Fochler and de Rijcke 2017). This discussion has in turn built especially upon the anthropological studies of Marilyn Strathern on the influence of 'audit cultures' within the university (Strathern 2000).

In an STS study which is highly pertinent to the following discussion, Sørensen and Traweek have examined two academic institutions in Norway and the USA, exploring 'continuities and discontinuities' linked to the changing relationship between universities and society. As they put it: 'universities have been radically and repeatedly transformed. Above all, they have grown and at the same time been re-organized, while the conditions they offer to faculty and students have been altered substantially' (Sørensen and Traweek 2022: 1). As noted previously, while these authors seek to 'highlight epistemic politics and epistemic practices as they are enacted in the everyday life of the two universities we study' (ibid: 15), our approach is decidedly more institutional in focus. In line with Shapin's analysis of academic life (2009), our argument is that, while universities have certainly undergone significant transformations in recent decades, the quest to make science useful to society

is by no means new. Here, Shapin's claim that science was 'never pure' has been an important source of inspiration (Shapin 2010).

Turning specifically to the two 'non-traditional' academic settings considered here, both technical universities and business schools have been the subjects of historical study. Notably with regard to the former, Norton Wise has produced an account of the emergence of nineteenth century technical schools in *Aesthetics, Industry and Science* (2018). A number of historical accounts of the business school have been published (Benner 2017), including Rakesh Khurana's study of the development of US business schools from the late nineteenth century onwards and the shift *From Higher Aims to Hired Hands* (2007). Whilst we adopt a historical perspective in this account, we do not present ourselves as academic historians, but rather as STS scholars who draw gratefully upon the work of historians and others in pursuit of our analytical aims.

Three further strands to this discussion should be noted. The first is that in viewing universities explicitly as institutions, we are making a link with the large body of literature in institutional theory. Institutions in this context consist of social structures such as routines, norms and rules, which have become resilient enough to be taken for granted as guidelines for action (DiMaggio and Powell 1983, 1991). While we do not claim to be conducting an analysis according to institutional theory, we use the term 'institution' to sum up an entire network of stabilized relations in order to consider its effects on what could be termed the macro-level.

The second strand relates to the discussion of 'modes of relevance' which forms the central theme of this special issue. Brunet et al. (2024) have surveyed this literature, noting especially the diverse modes of doing relevance and the contrasting ways in which research is aligned (or not) with societal and environmental needs (see also Nicolai and Seidl 2010). In sharing this general direction, our particular contribution is to place this discussion in an institution-wide and historical perspective. The suggestion that the institutions in question have been 'always relevant' is also intended as a contribution and provocation to contemporary debate over the relationship between academic excellence and societal value (Brewer 2013; Collini 2012; Lynch 2009).

The final strand to which we make explicit reference relates to previous discussions of the relevance of social scientific research specifically within the business school and the technical university. In terms of the former, there has been a long-running debate within the business school world concerning whether these institutions have in some sense 'lost their way' (Bennis and O'Toole 2005; Parker 2018; Pettigrew 2011; Simon 1967; Tourish 2019, 2020). To summarize a large discussion rather succinctly, is it possible that, in seeking academic excellence and research credibility, business schools have forgotten their professional and vocational purpose? (Irwin 2019, 2023). Often referred to as the 'rigour-relevance debate', discussion has centred especially on the relationship between research excellence (often as defined by publication in top-tier journals) and 'real world' impact. One way of interpreting this debate is as an existential disagreement over the aims and purposes of the business school—over its very *raison d'être* (Irwin 2019). Another way of conceptualizing it is as a contestation over the value and contribution of social science: should social scientific research in this setting be *for* or *about* business?

While the role of social scientific research in the context of the technical university may not have been debated so extensively, the core mission of these universities has nonetheless changed substantially over time (Geschwind and Broström 2020; Harwood 2006). Especially the purpose and content of engineering education have been highly debated and seen as divided between an academic function of providing theoretical scientific knowledge and a professional function of preparing for industrial practice—coupled with a third mission of providing social service (Jamison et al 2014). Such discussions also touch upon the general relationship between natural and social science when it comes, for example, to dealing with environmental matters and societal challenges (Mitcham 2009; Weil 1984). To characterize once again a very broad discussion, is the purpose of social scientific research in this setting to assist in the implementation and adoption of technical knowledge—or can there be a more fundamental task for social science in addressing matters of 'real world' application?

Unavoidably, discussion of the relationship between social science and relevance raises questions about the practical definition of social science but also the intellectual development and direction of social scientific research. In terms of the former, does social science, for example, include economics generally and also more specific fields such as accountancy, law and finance? In keeping with our top-down and institutional perspective, we have adopted a rather broad and inclusive approach to social science as a category, choosing for example to include economics and finance in our treatment. Regarding the latter point, other studies might well supplement our analysis especially in exploring the shifting borders between social science and neighbouring disciplines but also with regard to Savransky's (2016) suggestion that relevance can be configured or inscribed within academic knowledge (see also Granjou and Arpin 2015). Business school research would be an obvious case for empirical analysis concerning the co-production of societal relevance and academic scholarship, and the implications for the intellectual development of the field.

Methodology

We will now turn our attention directly to two Danish public universities (DTU—Technical University of Denmark, and CBS—Copenhagen Business School) and the evolving frameworks they have offered for the relationship between social science and relevance. Here, we are discussing institutions in which we have considerable personal experience. The first author has been employed at CBS since 2007 until the time of writing: initially, as dean of research and since 2015 as professor. The second author worked at DTU from 2019 to 2023 as professor and head of division in an academic department, DTU Management. Previously, she was employed at CBS. Given our roles as both researchers and managers and also the fact that our field of research is broadly focused on science-society relations, we have continuously engaged in discussions and reflections on the societal and academic role of these institutions as a normal part of our professional life. In addition, we have written and given talks directly and indirectly about these institutions and their role in society (Horst 2022; Irwin 2019, 2023). On this basis, the methodology of the

paper can be described as a historical account but also a form of self-ethnography, in which: 'the researcher-author describes a cultural setting to which s/he has a "natural access", is an active participant, more or less on equal terms with other participants. The researcher then works and/or lives in the setting and then uses the experiences, knowledge and access to empirical material for research purposes' (Alvesson 2003:174).

The point of self-ethnography is not to engage in introspection, but to 'draw attention to one's own cultural context, what goes on around oneself rather than putting oneself and one's experiences in the centre' (Alvesson 2003:175). The aim is to utilize the closeness and familiarity of the setting to perform cultural analysis. However, and as Alvesson has observed, the challenge then is to be able to break free from the 'taken for grantedness' which comes with being intimately connected to a specific context.

To deal with this challenge of closeness, we will combine the two cases so that we can compare and contrast them. Specifically, we will draw upon official historical accounts of the two institutions. For CBS, we use the hundred-year history written by Jacobsen and Sørensen (2017). For DTU, we use the official website created by historians employed in the institution (historie.dtu.dk/dtus-historie). To expand on the DTU story, we have also conducted two short written interviews with staff at DTU to gain a better understanding of developments in the latter decades. What we present in this paper then is a synthesis of the institutional narrative about itself and its relationship to relevance seen through a historical lens.

One challenge for a historical account of relevance is that the key term has not been consistently employed over time—and may only have crept into institutional discourse in recent years. However, and as we will discuss, this does not negate the strategic significance of what would now be termed 'societal relevance'. Accordingly, our analytical approach is to identify major trends and developments related to the purpose and identity of the two institutions—whether or not the language of relevance was directly employed. The term itself might be a recent innovation within the university. Nevertheless, the questions with which it is linked have much deeper roots. We begin with the technical university.

The Technical University

Origins

One point to make right from the start is that universities have characteristically approached relevance in terms of the needs of their students (Jamison et al. 2014; Martin et al. 2023). These needs have in turn often been defined with close reference to what are seen as the requirements of the labour market. Thus, the Technical University of Denmark (DTU) was established in 1829 as a polytechnic institution to address the apparent demand for higher level teaching in natural science and craftsmanship. Even then, the two areas did not sit easily alongside each other. This has resulted in strategic shifts and tensions which do not fit with a simple narrative of logical progression and development. Instead, in the founding and development of

DTU one can identify a mix of academic principle, practical opportunity, societal (especially labour market) demand and emergent strategy-making (Mintzberg and Waters 1985).

During the eighteenth century, the state and several private actors had tried to push the University of Copenhagen towards more extensive teaching in natural science—for which they saw an economic need. Despite some internal support from, among others, the renowned Danish physicist HC Ørsted, the majority of professors at the University resisted such efforts. Ørsted saw his chance at the beginning of the 1820's when it became clear there was a demand in Denmark for dedicated theoretical teaching of craftsmanship, including technical drawing, to young apprentices. Ørsted seized the opportunity and promoted the idea of a teaching institution that combined theoretical teaching in natural science with practical training in technical skills.

Ørsted became the first director of the new teaching institution. However, its organization was heavily influenced by his own preference for natural science as a theoretical endeavour. The academic classes in maths, physics and chemistry were co-taught to students from the University of Copenhagen by professors from that institution. Meanwhile, practical classes were non-obligatory, and its teachers were not part of the collegium making decisions on the content and form of education. Ørsted was heavily influenced by German idealism and the romantic period, and he considered general knowledge about natural laws important (Christensen 2009; Korsgaard 2004). While his motto for the new university was 'til gavn'—which can be loosely translated as 'to be useful'—he did not actually want considerations of practical use to influence teaching and research at the institution. To Ørsted, knowledge had a strong intrinsic value and usefulness, or what we might call 'relevance', was a concern for further down the line.

It follows from even this brief summary that a tension related to the larger issue of relevance was built into the foundation of this academic institution. On the one (and very much upper) hand, there was the pursuit of theoretical understanding and academic learning. On the other, there was practical application. However, this relationship was not static and would alter in the next period of DTU's existence.

Serving Society

During the first hundred years of DTU, a main priority for graduates was to develop national infrastructure, including sewage systems, roads, railroads, bridges, and waterworks. Already, the need for pragmatic conciliation between Ørsted's original ideals and expressed labour market demands was apparent. Industrialisation came late to Denmark. Nevertheless, around the beginning of the twentieth century, mechanical production methods started to be the norm in many Danish industries and the engineering profession became established as a crucial element within the modernization of Denmark (Harnow 1998). Student engineers were trained to develop society and achieve growth and prosperity through technological development. Importantly for the main topic of this paper, research came to be seen

primarily not as a goal in itself but as a supporting activity for these educational and societally-relevant endeavours.

The expansion of the engineering profession continued through the twentieth century. Ørsted's original conception of the intrinsic value of knowledge had by then transformed into a general notion of engineering as the practical side of natural science. Here the important point must be made that universities in Denmark (of which there are now only eight) are generally public institutions rather than private or autonomous in character. As contemporary Danish policy discussion around the universities also confirms, this can mean that politicians and the relevant ministry exert considerable influence over university strategy, development and, not least, funding.

In what can be seen as an initial expression of concern with the societal aspects of engineering, early in the twentieth century an interest developed within DTU in 'Driftsteknik'—later known as 'Operations Management'. However, in general terms, social science did not enter the curriculum until much later when the energy and environmental crises of the 1970s lead to an increased attention to questions of work environment, pollution and societal aspects of technology.

The Modern Research University

In the last decades of the twentieth century, the balance of DTU's activities came into discussion once again. Perhaps influenced by global developments in universities and increased internationalization (Persson 2014), the movement now was for research to become a core activity in its own right rather than primarily a support function for teaching. In DTU, this led to an increased focus on research output and excellence. During the same period, societal actors began to discuss the need for more dedicated efforts within knowledge dissemination. In response, DTU established an outreach office as well as a science shop to cater for companies and other societal actors.

In this period, we can identify a shift towards research being the leading activity at the university and a core parameter for discussions of relevance. It must be emphasized, however, that support for industrial development and providing technical solutions to societal problems were not seen as being in competition with research excellence. Rather, societal relevance was portrayed as the practical application of cutting-edge research.

Social Science at Work

Social science at DTU was by this point conducted in small enclaves, with social scientists primarily being employed on the basis of teaching needs. Certainly, DTU was not marketing itself as a social science research institution.

Going further, two tendencies have been especially prominent in the development of social science at DTU. One has concerned the use of social science knowledge to improve the efficiency of technology and production and has primarily served engineers in their capacity as leaders of organizations, production systems and technological innovations. The other has been more focused on the societal responsibility

of engineers: including workers' rights, work environments, environmental pollution and questions of technology assessment and ethics. The first is generally supportive of societal institutions and power structures. The second has often been more critical towards existing political systems and social processes. While both of these tendencies survive at DTU today, the former can be seen to have become the stronger.

At the end of the twentieth century, the university began profiling itself, in some competition with the institution we will consider next, as the Danish university for business: Danmarks erhvervsuniversitet. However, this did not imply a fully developed effort within business research. Rather, it focused increasingly on the commercialization of technological results and strengthening capacities within patents and licensing, contract research, business development and spin-outs. Third party funding grew and, since the start of the millennium, has become the main source of income for many research groups at DTU as well as a clear demand on full-time professors. Simultaneously, DTU strengthened its international connections and in 2011 became part of the European EuroTech alliance, which describes itself as a consortium of Europe's leading technical universities.

In addition, the new century witnessed a strong focus on student innovation and entrepreneurship, and consequently the development of 'Skylab' as an institutional focus for activities in this area (www.skylab.dtu.dk). While the first wave of commercialization pressure from external stakeholders focused on the dissemination of research results, the early decades of the new century have seen renewed attention to the student body at DTU as a main vehicle for relevance. However, it is not only their specific skills, knowledge and practical capacities which are considered to be 'relevant', but also their entrepreneurial and innovative mindset.

Two decades into the twenty-first century, research in social sciences is primarily located in the DTU Management Department and focused on economics, leadership and management. There is a strong orientation to producing excellent research in these fields. However, compared to the rest of DTU, the Department's teaching load is high and seems to be an important justification for its existence. While academic staff in the Department are often motivated towards social scientific output in its own right, experience suggests that the DTU leadership considers it important for social science at DTU to be 'til gavn' and that this means relevant within engineering science and the engineering profession more broadly.

DTU does not cater for all forms of social science, but particularly for those aspects which are seen as significant for the development and implementation of technology in society. In practice, social scientific research has predominantly been quantitative in form and many staff at DTU Management have a basic training in mathematics, statistics or engineering. Notably, however, recent discussions of techlash and experiences of lack of support for biotechnological and green energy technical solutions have led to a renewed interest in STS.

Drawing upon what was earlier presented as 'self-ethnography', the invitation to one of us to build an STS group at DTU came with the explicit support of DTU leadership—even if there was also a certain, perhaps understandable, sense of 'we know what you do is important, but we don't really understand it'. Introducing more qualitative forms of social science research into the DTU system nevertheless came with challenges in terms of navigating the DTU-wide evaluation of research

based on standard bibliometrics. It was, for instance, a surprise to be informed that h-factors based on the Web of Science were used to determine salary levels for new recruits.

More generally, it was a distinct experience that DTU's leadership placed great emphasis on relevance when it came to hiring academic staff. An impressive publication list was necessary in order to be considered for appointment. However, there was also substantial attention to candidates' potential for collaboration with external partners as well as grant acquisition. When assessing STS applicants, this meant that there could be considerable interest in building links with non-business partners such as public organizations and NGOs—not least because such collaborations were seen to be ways of generating grant income, which was in turn judged to be a necessity for a successful researcher.

All recruitments were considered according to collaborations and impact. However, the capacity to achieve 'excellence' funding—notably through the European Research Council (ERC) and similar national schemes—could be used as a partial counter-balance. Although social science might not be primarily viewed in terms of its intrinsic value, markers of research excellence linked to external funding still carried weight—and were especially seen to augment the Department's standing within the University. It seems that in the modern university no single factor, including societal relevance, can ever be entirely dominant but must co-exist with other institutional concerns and pressures.

The Business School

Origins

If we now consider the case of Copenhagen Business School (CBS), this institution can trace its origins back to activities in Denmark during the nineteenth century which reflected a growing concern with management training and development. Already by this time, what we would now describe as business schools were developing in Europe and the USA. In Denmark, the famous industrialist C.F. Tietgen established such a business school in 1892. The initiative was short-lived. Still, the movement in the business community to create a higher education institution focused on trade and economics had started to gather momentum. Nevertheless, and as the authors of an official history of CBS sharply put it: 'A consistent developmental track has been constituted by a constant struggle for recognition, a battle fought on two fronts. On the one hand, this has been a battle for academic recognition in which for many years the economists at the University of Copenhagen displayed a condescending attitude toward the upstart institution (...) which for decades was seen as a "cramming" school that was in the pocket of the business community. On the other hand, the school has fought to be recognized by this very business community, which has again and again criticized (...) CBS' educational programs as being too theoretical and unworldly.' (Jacobsen & Sørensen 2017: 11)

In 1880, the Association for the Education of Young Businessmen (FUHU)—now known as the Danish Society for Education and Business (DSEB)—was created

with the mission of working 'to educate young merchants not only in order to prepare them to engage in domestic trade but also, and perhaps primarily, to prepare them to engage in foreign trade.' (cited in ibid: 17). A series of initiatives followed—especially at pre-university level. The start of CBS can be traced to a lecture series initiated by FUHU in 1917. Behind this initiative was the drive to establish an advanced education programme in commerce and business science. A new administrative unit was created to support these activities. Its mission was to: 'give young members of the commercial class an opportunity to acquire in-depth theoretical knowledge of the various areas of commercial life and in preparation for this give them an overview of subjects such as economics and jurisprudence, which in many cases constitute the background of a true understanding of the special trading companies.' (cited in ibid: 32)

Subjects covered during the foundational lecture series included economic theory, commercial engineering, book-keeping theory, Danish literature and social science.

Serving Society

As might be expected, given the close relationship between the Danish business community and the initial form of CBS (which for much of its history was known as 'Handelshøjskolen'), early courses were very much focused on business and training needs. Very significantly also, this was still a private rather than a public institution. A diploma course in accounting and bookkeeping was first created, followed by banking, stockbroking and insurance. European foreign languages were present from an early point. In the initial period also, advertising and auditing were developed. As noted in the previous discussion of the technical university, industrialization in Denmark developed rapidly through the twentieth century. This in turn created both larger enterprises and the need for new forms of management. By the 1920s, 'business administration' was presented at CBS as a scientific subject—even if still focused very much on education and training rather than research. As the director of CBS put it in 1930:

'The Danish Business School has thus now been expanded and become an institution of higher education where practice and theory are wholly integrated, so that here…. there should be no danger that higher education becomes so theoretical in nature that those who have subjected themselves to it have difficulty coping with practice.' (cited in ibid: 51)

The Modern Research University

Research was not a driver of CBS in its early decades. However, in the late-1920s a discussion developed around the possibility of appointing professors—just like at Copenhagen University. The Faculty of Law and Political Science at the University of Copenhagen was not supportive as 'the instruction itself at the Business School does not seem to the faculty to have the same scientific character as that at the university' (cited in ibid: 64). That battle was slowly won and the business school's first professor was appointed in 1936. This also marked the creation of the first research

department—despite concerns within FUHU's board that research was outside the school's mission and purpose. In line with the quotation above from Jacobsen and Sørensen, by this point, the tension between the practical needs of the business community and the theoretical concerns of, not least, academic economists was very apparent.

Two developments are especially relevant to CBS' emergence as a research university. The first was the substantial growth of the institution—including the creation of a series of professorships and academic departments. By 1952, the business school could include in its mission statement the aim 'to contribute to research on the economic laws and interactions that are of decisive significance for the conditions applying to business life' (cited in ibid: 129). With this substantial development after the Second World War came the need for high levels of state support. CBS could not continue as a privately-owned institution while being financed to a large degree by public funds. In 1965, CBS became a 'self-owning institution' and a historic break with FUHU had taken place. By 1975, CBS had been fully placed under the new University Statute and its formal standing as a public university was complete.

The second significant development relates to the further growth and institutional strategy of CBS since the 1970s. Specifically, the rektor from 1987 till 2009 pursued an ambitious programme of internationalization in education but also in research. From the late 1980s, the English name, Copenhagen Business School, came to be increasingly adopted. Greater international research collaboration and recruitment followed—aided by the large-scale use of English as a teaching language. During this period, the emphasis was on academic breadth and, to a degree, experimentation. Teaching and research in areas such as philosophy, sociology, history, culture and communication, and political science were specifically developed—alongside the more traditional fields of economics, law and languages. It is fair to state that this policy of educational and academic expansion won support in many areas of the academic community—but still faced the long-standing issue of being criticized both by the business community as being 'too theoretical and unworldly' and by those, now inside the institution, who would prefer a narrower focus on business economics and the internationally-standard business school curriculum.

Social Science at Work

CBS began life with a strong orientation to business and commerce—even if the inclusion of Danish literature in the original curriculum suggests at least a nod to general education. Subsequently, the quest for internationalization was combined with the adoption of a 'business in society' (or, latterly, 'transforming society with business') profile—covering research and teaching in communications, philosophy and history as well as more 'mainstream' areas such as economics, organization and finance. Influenced by a university board with roots in the Danish business community but also by student preferences, the recent strategic direction has been towards a stronger focus on student employability and industrial relevance—whilst maintaining a commitment to 'Nordic' values of sustainability and social responsibility.

It follows from this discussion that, even within one institution where relevance and social science have been present from the start, relevance has been a contested category. Within university strategy documents, the tendency has so far been to work in an inclusive fashion: to acknowledge academic and disciplinary diversity rather than to set one narrow path to the future.

In terms of research practice, just like at the technical university, there has been a simultaneous movement towards international research publications: often focusing on what are defined as 'top level' journals. In the case of CBS and other European business schools, attention has been paid especially to the Academic Journal Guide (AJG) and related indicators (Irwin 2019). This is in some tension with international discussions of research assessment and the movement to treat journal impact factors with considerable caution (DORA 2013; European Commission 2021; Hicks et al. 2015; Wilsdon et al. 2015). Indeed, at the time of writing CBS is the only Danish university which has not signed the CoARA (Coalition for Advancing Research Assessment) declaration. As the previously mentioned 'rigour-relevance' debate within contemporary business schools also suggests, the ambivalence or tension surrounding the relationship between service to the business community and international research recognition remains.

A second key aspect here relates to the goals and purposes of the business school in question. Is relevance—rather than, for example, academic standing—its primary aim? And, if so, from whose perspective is this to be judged? The point here is that a broad range of answers to these questions is possible, even within the same institution. For many members of the Danish business community, relevance is judged primarily in terms of student employability and practice-oriented teaching and research. For others, including some students, employees and external actors, relevance is a much broader matter of engaging with 'grand challenges' and participating in key societal debates—including a willingness to criticize orthodox opinions and both governmental and industrial strategies. From yet another perspective, especially among a large group of academic staff, relevance is defined in scholarly or academic terms: and in particular as journal papers in highly rated business and management journals. One can conclude that the definition of relevance in this setting is not fixed or stabilized but open to competing interpretations and shifting definitions.

In the previous discussion of DTU, it was observed that these tensions can become especially apparent in the context of hiring decisions. Drawing upon direct experience, a similar point can be made about CBS where there have frequently been discussions about the balance of requirements for any particular academic appointment. As throughout the business school world, critics but also many members of academic staff have argued that academic publications weigh more heavily than service to society (Jack 2020; Parker 2018; Tourish 2020). In a situation where research metrics are easier to count than claims to societal relevance, creating a form of isomorphic pressure (DiMaggio and Powell 1983), a certain imbalance appears in-built. Efforts have been made to counteract this pressure, notably in terms of broadening the formal recruitment and promotion criteria so that academic evaluations consider more than publications alone. However, the underlying challenge is hard to resolve and as such re-appears constantly.

Relevance in Historical and Institutional Context

In their account of the development of academic chemistry in the Netherlands, Hessels et al. observe both the 'increasing orientation' towards the production of 'relevant knowledge' and the changing meaning of relevance (Hessels et al. 2009). Emphasizing that relevance is not a 'completely new phenomenon' (Rip 1997), they nevertheless note that relevance is 'at the core of the relationship between academic science and society' (Hessels et al.: 398). As they put it: 'It is often assumed that the pressure for relevance has increased during the past few decades. However, it seems more fruitful to conclude that relevance can be expressed and expected in various meanings and forms. These forms can also be mutually contradictory…' (ibid).

In many ways, our account here fits with the analysis offered by Hessels et al. The pursuit of relevance in our two cases can indeed be described as a 'struggle': a struggle conducted both at a general level (for example, strategic discussions amongst the business school board) and in very specific cases (as we have observed with regard to hiring decisions). The justification for research has shifted across the institutions in question: as a pursuit in itself, as the underpinning for teaching, as the basis for practical intervention and problem-solving, as a major contribution to a larger innovation system, as a response to so-called 'grand challenges' (especially sustainability), even as a way of raising questions about the direction of socio-technical development and the role of business in society.

In line with other contributions to this special issue, Hessels et al. also draw attention to the diversity of the 'epistemic commitments' expressed as part of 'making relevant science' (Granjou and Arpin 2015). Certainly, our account has highlighted the different meanings associated with relevance and the complex relations between them. Hiring decisions are an evocative illustration of this as the requirement for 'excellent' research publications jostles against the need to build networks among business and other actors, and also teaching needs and capacities: all set in a context where it can be considerably easier, if also potentially misleading, to judge research performance on metrics than it is to assess relevance (Brink 2018; Espeland and Sauder 2016). As we suggested with regard to the technical university, in an environment where there are multiple demands upon the institution, no single factor—whether excellence or relevance—is likely to be entirely dominant.

In making these links to Hessels et al., we argue that our account, in addition to contributing a necessary historical and institutional perspective, brings some important new elements to the study of relevance. In the first place, and building on the previous point, we suggest that this has not simply been a matter of diversity or complexity but of what we would term 'multi-layering' as new and older approaches to relevance build upon and co-exist with each other. This has not been a story of progression from one form of relevance to another. Instead, our account indicates the settling over time of particular combinations of what was presented earlier as academic principle, practical opportunity, societal (especially labour market) demand and emergent strategy-making.

In the early days of the technical university, a concern for technical drawing and for basic understanding of natural sciences found themselves inter-connected

in 'garbage can' fashion (Cohen et al. 1972). If we take the business school today, a similar inter-connection is constructed between the employability of graduates, the competition for 'top quality' journal outputs and the wish to address grand challenges. From this perspective, older meanings of relevance do not necessarily disappear. Ørsted's attachment to the intrinsic value of research and FUHU's commitment to developing 'in-depth theoretical knowledge of the various areas of commercial life' still have meaning today. However, they are now joined by other relevance agenda, not least the challenges of sustainability, innovation, and nurturing students' entrepreneurial capacities. In that sense also, contemporary reflections on relevance rest upon previous institutional encounters and strategy-making processes: one might say the ghosts of old debates.

It is true that many new applicants, whether potential students or staff, to the business school will have little or no awareness of its previous institutional history, but rather view it as another international university within a global environment—or else as a route to future employment. However, for those inside the institution it is hard to escape older struggles over identity and purpose. Colleagues in neighbouring universities still look sceptically upon the business school's academic standing, members of the business community still wonder about the practical relevance of the research conducted, media reports still refer back to the institution's original name, there are still internal discussions about academic breadth and overall direction. Many, perhaps most, current members of CBS have little knowledge of the activities of FUHU. However, the sense of CBS as a rather unique but also still-emerging institution prevails—over a hundred years since its commencement. Whilst contestations over relevance might at times be presented as an institutional problem or challenge, they can be a way too of keeping alive basic questions of institutional identity and purpose.

Secondly, our account has presented relevance not as a side-issue or add-on to existing academic institutions but as a formative element. Of course, we have deliberately selected two institutions of an 'extreme' character in order to test our analysis. As the brief reference to the University of Liverpool suggests, this may well also apply to more 'classical' institutions. Nevertheless, it is important to note that in their origins at least these universities have been marked by reflections on relevance and purpose which have profoundly influenced their development. We are reminded of the significance of institutions in shaping the contexts of relevance, but also academic life more generally: often based on a shifting sense of the past, present and future (Barry and Elmes 1997; Felt 2017, 2024; Vostal 2016). Our account has in this way sought to place current discussions of academic working conditions (Cannizzo 2018; Gill 2014) in a larger institutional setting.

Thirdly, the shifting construction of relevance can be seen as both threatening for the social sciences but also as providing space and opportunities to operate in a flexible, cross-disciplinary and multi-dimensional fashion. To quote an old slogan from the business school in question: it is never a matter of either/or, but always both. One can, of course, view this as a promise and as a curse. It is important to recognize that uncertainty and change can create possibilities for some academic groups while representing an obstacle for other, perhaps more marginal, members of university staff. It follows too from our account of the changing conditions of relevance

that particular social sciences, for example STS, can find themselves both in and out of institutional favour—as appears to have occurred at the technical university.

In the case of the technical university, social science emerged as an afterthought—and then largely in response to changing societal concerns. As engineering became linked to social problems and a concern with both the positive and negative aspects of technological development so the need for social science—and therefore its relevance—increased. In this context, STS was more recently seen as a potential problem-solver: for example, introducing a focus on 'responsible technology'. Whilst social scientists might rail against this subservient or 'underlabourer' role, this at least has provided an entry point and an institutional space for social science.

For the business school, social science was not an afterthought but present from the start—especially if we adopt a broad definition which includes what is known as 'business economics'. Attention to global publication markers and measures of international research competitiveness is, however, a relatively recent development in the institution. As already noted, this can create, and perhaps reflect, a certain lack of clarity concerning the role and importance of research within this institutional setting. Relevance becomes a contested issue when members of academic staff are subjected to competing demands. At the same time, it becomes all the more clear that 'relevance' is itself a contested term. Are we discussing academic, societal, pedagogical, political, economic, national or global relevance? And from whose perspective is this to be judged? The questions are not new but may have become more difficult to answer.

As we noted at the beginning of this paper, Brunet et al. have distinguished four modes of relevance (Brunet et al. 2024). These can be briefly summarized as a) relevance in selecting and reorienting research topics and disciplines, b) relevance as engaging societal actors and conducting user-driven research, c) relevance as rearranging the interaction between science and policy and d) relevance as transforming academic institutions. In the previous account, three of these modes have been considered. The exception has been the third mode: even if there is clear evidence of policy relevance emerging from both institutions.

Nevertheless, our emphasis throughout has been on the fourth of these modes. As we have considered this, it very much involves the 'forming' as well as 'transforming' of the two academic institutions. From this perspective, the institutional discussion of relevance is not simply an add-on, a supplement or a passing trend, but a core element in building institutional identity and purpose. The language of relevance might not have been employed by either HC Ørsted or the board of FUHU. However, the questions raised and the strategic choices faced would be decidedly familiar.

Conclusion

It is hard to conclude this discussion of relevance, social science and institutional development without considering the relevance of our own account. In writing about two institutions with which we have close personal connections, we have inevitably reflected upon how, if at all, our analysis might be of practical benefit to those institutions and to other societal stakeholders. Can a social scientific account of relevance also be relevant?

We will offer three final points. The first is that our account has attempted what might be considered the classic social scientific role of pointing to the framing of current discussions. Often in STS this has taken the particular form of observing that things could be otherwise (for example, Nowotny 2008). In our case, this could almost be reversed as *plus ça change, plus c'est la même chose*: in other words, what seems to be otherwise within current discussions can actually be a rediscovery of the old. Either way, one of our claims to relevance is in asking basic questions about the current terms of discussion in the hope that this will encourage deeper consideration about alternative possibilities.

Our second claim to relevance is in, so to say, bringing relevance in from the cold. If relevance is formulated as yet another external demand, as an additional burden on the individual researcher and as likely to be codified in reductionist form, then it is hard to approach it in constructive terms. If instead, and as we have suggested here, it is presented as a more fundamental matter of institutional purpose, direction and identity, then—at least for us, but hopefully for others, too—it becomes a more challenging but also more compelling point of focus. Others might well observe that relevance is just another element in the contemporary language of managerialism and neo-liberalism (Maskell and Robinson 2001). However, looked at more positively—and perhaps more creatively—it is possible to see it as an important strand within the now-crucial discussion of universities' responsibility both to themselves and to wider society (Barnett 2006; Holmwood 2011; Horst and Irwin 2018).

The third suggestion of relevance lies in the role ahead for social science and the implications in terms of 'why the social sciences matter' (Michie and Cooper 2015). In discussing, and working in, what we have described as 'non-traditional' universities where relevance has been a significant strand, we have also, at least implicitly, attached ourselves to a certain imagination of social science at work. This imagination includes a capacity for cross-disciplinary cooperation, for bringing societal challenges inside the university, for mutual learning across institutional boundaries, and for an 'engaged' model of the purpose of social science. Others are free to present their own imaginations. However, the implication is that, in exploring the relationship between relevance and social science, we are raising questions not only for the practical definition of relevance but also concerning the aims and purposes of social science and the university as a whole.

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