

8. The integrative humanities – and the third research policy regime

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8.1 PRELUDE: THE MARGINALIZATION OF THE HUMANITIES

The emerging welfare states of postwar Europe were characterized by solid expansion of research and higher education. A new version of modern progressivism was shaped. It was built on long-standing ideas of the transformative role of scientific knowledge in the development of modern democracies, and materialized in the 1950s and 1960s in a plethora of new research institutions, areas of university education and modes of expertise. Through this development, a major shift occurred in the overall direction and balance between different forms of knowledge in society. It was reflected in changing professional and social hierarchies, the integration of vocational training into universities, and the expansion of ‘applied’ and future-oriented areas of research and education, especially technology and medicine but also the social sciences and in particular economics. Indeed, it was in this era that the idea of universities as constituting a national system and a major ‘sector’ of political reform began to take hold in Western societies, instigating more elaborate policies of research and higher education, and rising expectations about knowledge as a driver of institutional and economic welfare and democratization.

This also meant that older forms of knowledge were marginalized and discredited. The atmosphere of technological rationality that became aligned with social progress in the 1950s and 1960s did not favour historical and theoretical knowledge. Nationalism did not lose its grip on the political imagination in postwar Europe, but became increasingly attached to economic progress and future planning, and less focused on cultural aspects. It should therefore come as no surprise that it was in this period that the critical trope of ‘the crisis of the humanities’ was established in many countries. In the English language, this discursive coupling has often been traced back to the historian J.H. Plumb’s book, *Crisis in the Humanities*, from 1964 (e.g. Benneworth 2015, p. 3). Plumb described the humanities disciplines as increasingly obsolete in relation

to the alliance between science and democracy in contemporary societies. Their knowledge was ill-suited to respond to the promises of industrial and technological development, and their values considered old-fashioned and elitist (cf. Östh Gustafsson 2018, 2020).

A similar sense of a growing mismatch between the humanities and the role of knowledge in postwar societies formed the basis for many similar descriptions of the crisis of the humanities in Europe and the US in the 1960s and 1970s. It was also reflected in the shifting balances and overall organization of knowledge in higher education and research policies. In Sweden a major university reform was initiated in the late 1950s, which for the first time separated the humanities and the social sciences into different faculties. From 1959 they were also separated into two research councils. The reform positioned the social sciences as progressive, future-oriented and closely integrated with the development of new and important institutions and social policies in the welfare society. The humanities, on the other hand, were linked to outmoded hierarchies, a postwar value crisis regarding its German orientation, and explicitly assigned the new role of providing ‘cultural services’ to society (Ekström and Sörlin 2012).

It was in this context that the self-perception of the typical humanities researcher as an outsider in academia, primarily engaged in defensive and reactive modes of critique, was historically conditioned (Ekström 2022b). Ever since, there has been a sense that the humanities have been in a permanent crisis (Collini 2012, p. 63). In the Swedish case, this was true even in periods of expansion and increasing resources for humanities research and education in the growing number of universities and university colleges from the mid-1960s and onwards (Ekström and Östh Gustafsson 2022).

We experienced the continued impact of this mood, and frame of mind, during our work with a collaborative research project on the future of the humanities, which we conducted in the early 2010s (Ekström and Sörlin 2011, 2012). One aim of this initiative was to historicize and question the self-anecdotal and nostalgic understanding of the decline of the humanities in Sweden (e.g. Nordin 2008) and elsewhere, and instead make an attempt to move beyond the history of individual disciplines towards an understanding of the humanities as an integrated field of knowledge production. What was needed to understand the current status of the humanities, we suggested, was an empirically founded discussion of both the expansion and the relative marginalization to other sciences that characterized their institutional history in 20th century Sweden and elsewhere (Ekström 2016a). However, any discussion of the past and future impact of the humanities was met by the taken-for-granted expectation that its actual purpose was to address once again the decline of the humanities. It simply went without saying and became a hindrance to productive dialogue around these issues. Reactive critique, we concluded, was

the predominant atmosphere and, in effect, a barrier for new ideas about the humanities in the broader context of knowledge politics.

8.2 NEW EXPECTATIONS

Today, a decade later, this has changed profoundly. ‘Crisis’ is no longer a knee jerk phrase that pops up as soon as the word ‘humanities’ is mentioned, although this still occasionally happens, indicating that the speaker may not be following this discourse very closely. Although there are certainly national differences and good reasons for concern over austerity policies and waning student interest in some countries, not least in the US, the shift of atmosphere is international, especially if the situation is more broadly conceived (Mandler 2015). One indication of this shift of atmosphere is the expectations that current research policies place on the humanities. When surveying Swedish policy documents and research bills in the context of our previous project, we found that the humanities were barely mentioned in official research policies from the 1970s and onwards. This did not mean that no resources were allocated to the humanities. On the contrary, there was a continuous increase of resources for humanities research in Sweden from 1970 to 2010.

Importantly, however, the distribution of educational resources has followed a different pattern during the same period, and especially after the university reform in 1993, which applied new modes of financial management to the allocation of resources to the university sector. This created a widening gap between research and education, which was further boosted in the 1980s and 1990s by a nationalist concept of innovation that was disproportionately focused on short-term economic growth through research investments. No single measure can turn this development around, but it is a disturbing fact that for more than 25 years Swedish universities have been spending constantly growing proportions of their resources on research, large-scale infrastructures and administrative operations while the investment in each student has been decreasing in the same period. In the long run, and aside from its immediate effects on the quality of education, this development threatens to push Swedish universities into models of commercialization of education that would severely shift the composition and function of knowledge in future society. Today, this accumulated imbalance has become an obstacle to a proper understanding of the potential and need for integrating education across the cultural, social and natural sciences in ways that can allow a proper response to the huge and complex challenges that current societies are facing.

What was particularly striking in the survey of Swedish research policies was the complete lack of expectations attached to the investments in the humanities, which was in stark contrast to investments in medicine and technology. Not in any single one of all research bills in nearly 35 years had

there been clear articulation of any purpose for which society might need the humanities. There was an activist and eagerly monitoring view of development in computers and information technologies, surgery, educational theory and practice, ecology and sundry forms of technology, and an eloquent account of the misfortunes that lay in store if Sweden neglected any of these and countless other areas of knowledge. Yet, on the humanities there was scarcely a word. No collapses awaited the nation, no vital functions of society were threatened if Sweden's faculties of humanities did not deliver (Ekström and Sörlin 2012).

In this respect, the two most recent research bills that were commissioned by the Swedish government signal a change in policy attitudes (Swedish Government Prop. 2016/17:50, Prop. 2020/21:60). Importantly, they argue for the need for long-term perspectives on research development. They point to the human and social sciences as areas of strategic importance and recommend a further strengthening of resources to these areas with two sets of arguments. The first refers to the societal importance of area-specific knowledge from the human and social sciences; the second to the integrative role of these areas for other research fields and for interdisciplinary knowledge production. In conclusion, the documents forward an understanding of the human and social sciences as a necessary '*knowledge base* for finding solutions on the major problems and challenges of our time' (Prop. 2016/17:50, section 8.2.1).

This is a very different language when compared to the more or less absent humanities in the former official research policies in Sweden. We introduced the concept of knowledge bases in our 2012 book on the future of the humanities. It was a way of thinking about knowledge as a long-term infrastructure in society and the cultural and social risks involved in an unbalanced knowledge ecology. It is promising that these concerns have entered official policy discourse. An even more expectant view on the humanities was formulated in Norway. In 2017, a parliamentary inquiry on the humanities was released, covering more than 120 pages and attaching considerable weight to the humanities both in terms of long-term, infrastructural knowledge needs in society and in finding solutions to contemporary transformations. In particular, the Norwegian report elaborates the consistent and comprehensive use of humanities knowledge in virtually all areas of society, ranging from national security and business to schools, cultural institutions and public policy (*Humaniora i Norge*, Meld. St. 25 2017).

8.3 INNOVATION FROM THE HUMANITIES?

The rising expectations also meant that the humanities, until recently more or less absent in the innovation literature, started to make a presence there as well. This was predicated on a broadening of the concept of 'innovation', especially after the financial crisis in 2008–09, and the increased interest in social inno-

vation (Mulgan et al. 2007). There has also been a growing realization over the last couple of decades that fundamental dimensions of societal transformation have to do with habits, values, affect, communication, tradition, religion, and other deep and often cultural properties of nations, regions, firms and organizations. This should perhaps have come as no surprise; after all it used to be a hegemonic idea in historical explanation, and a backbone in classical sociological theory from Tönnies, Durkheim and Weber all the way through to Karl Polanyi who in *The Great Transformation* (1944) suggested that deep societal change comprises the simultaneous transformation of institutions, technologies, values and ideas.

However, this had shifted considerably in the postwar decades, with the rise of research and, later, innovation policies. Being prescriptive and future-oriented they pointed almost singularly to economic and technological drivers of (desired) societal change and honed in on military interests and, above all, economic growth as the central justifications for large investments in knowledge. Coinciding with a narrowing self-understanding in the humanities of their own mission this led to a marginalization of this entire field of knowledge as a relevant partner in the organization of future societies. For the definition of ‘innovation’ the humanities played virtually no role at all, nor were they for a long time expected to contribute much to engagement with rising global issues such as environment, climate or natural resources (Warde et al. 2018), or for that matter conflict, terrorism or war which had been classical topics of historical and philosophic inquiry but were typically not absorbed into the postwar humanities repertoires but rather institutionalized as parts of the social sciences, in technical faculties, or in specialized institutes, making humanities knowledge, if not irrelevant, invisible and reframed as social-technological knowledge (Bertilsson 2022).

This too has changed. A key factor in the reassessment of humanities knowledge is the fact that humanities scholars have increasingly started to embrace a broader, socially engaged, sometimes challenge-driven research agenda. This work often implies integrative and interdisciplinary approaches such as environmental humanities (Sörlin 2012; Emmett and Nye 2017), energy humanities, public humanities, medical humanities or digital humanities – collectively sometimes called ‘the integrative humanities’ (Sörlin and Wynn 2016) or ‘the new humanities’ (Williams 2019). They are part of a growing exploration of humanities-informed problematization and innovation, and we should pay attention to how it is articulated among representatives of the humanities and in policy, and to how the humanities present their innovative capacity in impact cases and other documentation. The reassessment also brings with it a review of the humanities’ longer track record: were, perhaps, the humanities always innovative with comprehensive impacts on societies? Has it rather been the methods and definitions applied by innovation studies that left impacts

by humanities uncharted? What can be gained by a clearer articulation of the social responsiveness of the humanities in the past? This chapter examines how recent initiatives in integrative humanities take shape institutionally, comparing disciplinary academic departments with interdisciplinary centres and specialized institutes.

Another neglected but increasingly urgent area of change and innovation in the 21st century concerns the unregulated and commercially driven implosion of semi-public digital arenas, and how it effects collective processes of value making, knowledge formation and responsabilization. Even if the humanities never lacked in specialization they hold, as an integrated area of knowledge, a particular relation to the history of public spheres and the distributed, infra-structural and rhizomic character of knowledge in modern society. In light of the contemporary clash between deep and multifaceted polarization, on the one hand, and the frames of coexistence inherent in the global and planetary scales of contemporary crises, on the other, knowledge institutions need to assess and emphasize their role and responsibilities in shaping future publics. The accumulating ‘deficit of publicness’ (Ekström 2022b) in contemporary society erodes epistemic trust and structures of sharing knowledge precisely at a moment when they are in critical demand. This problem involves a range of aspects of the interplay and shifting historical dynamic between civic culture, public institutions and infrastructures of communication. For knowledge institutions, it points to the importance of addressing the relation between the communication and production of knowledge. Especially promising in this respect is the potentially reintegrative forms of public interaction and knowledge exchange that might emerge from hybrid niches of institutional innovation.

8.4 THREE INTEGRATIVE DIMENSIONS

The focus of these new expectations on the humanities is important as it also departs from a challenge-driven policy agenda with only one centre. If we are to take seriously the complexity of how knowledge works in society it is necessary to develop both research policies and knowledge institutions that are responsive to different time frames. The concern with knowledge as an infrastructure, and the balancing of different knowledge bases, can now be traced in many related formulations. For example, in impact definitions that focus more broadly on value creation (Johansson et al. 2018; Budtz Pedersen et al. 2020) and arguments on the role of knowledge in building cultural structures of preparedness for the unforeseen (cf. Jordheim and Rem 2014). Again, taken together, these formulations signal a much broader and ongoing shift in knowledge politics, moving away from the commodification of the knowledge concept that characterized late 20th century policy regimes.

To what extent do the humanities reflect and drive these new expectations? The emergence of postdisciplinary research fields such as the environmental, digital and medical humanities is an example of a multifaceted turn towards problem-driven, socially responsive and integrative knowledge production in the human sciences (Ekström and Sörlin 2012). There are clear institutional drivers and niches in this development. The environments that have taken the lead we identify as integrative in three dimensions. They are: (1) environments that facilitate collaborative work across disciplines and explore problems that can only be addressed through a combination of scientific approaches (inter-disciplinary integration); (2) environments that combine integrative research styles and educational innovation (modular integration); and (3) environments that work to integrate contexts of knowledge production with contexts of knowledge communication and collaboration (societal integration).

If there is a turn towards integrative environments in the humanities this development depends on a mix of factors. This is particularly true in relation to the institutional aspects of this turn, which are always local and path dependent at the same time as they form a broader pattern of historical formation and change. What we try to do, however, is to exemplify and to some extent typologize a development that we think is connected on an aggregated level.

We therefore argue that this drive towards integrative environments is held together by a set of deep-seated concerns that are shared more broadly between different integrative initiatives. The first is related to the growing epistemological doubt about many of the disciplinary divides and conceptual distinctions of the modern organization of knowledge. The second is related to an ongoing shift in knowledge politics, which manifests in conflicting policy regimes and impact definitions. The third is an increased responsiveness towards ongoing transformations in society giving rise to what may be called the transformative humanities (Sörlin 2018a).

8.5 COMPLEXITY REGIMES AND FRAMES

For more than three decades, arguments have accumulated around the complexity of knowledge requirements in late modern societies. Very briefly, these arguments can be summarized in three overlapping and yet different knowledge regimes. Such regimes have complex historical origins, often claimed to have primarily national origins and often articulated to serve national interests and competitive purposes (Campbell and Pedersen 2014). However, in the understanding of the currently emerging knowledge policy regime, and in particular its significance for the integrative humanities, it makes much more sense to see the explanatory context as international, if not global or ‘planetary’ (Chakrabarty 2019).

Several proposals of such sequences, including periodizations of them, have been presented in recent years. They vary in details and nuances, but they have many basic tenets in common. They would, for example, typically identify an early phase of science-for-progress and industry-led economic growth from the 1950s through to the 1980s, followed by a stronger focus on technology, innovation and competitiveness in the globalization era from the 1980s well into the 2000s (Ruivo 1994; Lundvall and Borrás 2005). The previous regime was marked by emerging ideas of research planning as an instrument of industrial and economic policy along the lines of ‘linear model’ thinking (Edgerton 2004). In Sweden, this regime was symbolically marked by the setting up of the Government’s Science Advisory Board in 1962. The latter regime was closely bound up with a neoliberal political order, performance management and weakened faith in governing according to political objectives (e.g. Hughes 1993), in Sweden manifested in the 1993 research policy bill and several other governance shifts for the higher education sector in the 1990s (Swedish Government, Prop. 1992/93:170; Benner and Sörlin 2007).

In the 1980s and 1990s, a new discourse in higher education and research policies typically focused on the creativity needed in rapidly shifting job markets and increasing economic competition on a national/global scale. Life was envisioned as a continuous process of relearning and the goal of education defined in terms of generic skills and flexible competencies. This understanding of the role of knowledge in post-industrial societies was embraced by the notion of the ‘knowledge society’, which envisaged that investments in research and innovation offered post-industrial societies a road to continuous growth. Knowledge thus became conceived of as an ‘industry’ or ‘economy’ in its own right, fuelling visions of a harmonious merger between Western capitalism and knowledge production.

In recent years, however, there is an increasing consensus that a new transformative agenda is leading the way and has opened up for a reframing of research and innovation policy ‘regimes’ or ‘generations’. Again, the details may differ but what they have in common is the emphasis on a shift towards transformative change, applying the concept of ‘directionality’. This shift towards a ‘complexity regime’ (Sörlin 2015) has been dated to the period of the Stern Report on climate change (2006) and the financial crisis 2008–09, which was also when the European Union (EU) challenge agenda was adopted, coined in the so-called Lund Declaration, and policy language was informed by ideas of the need for more ‘directionality’ (Stirling 2010) in order to seek desirable outcomes of innovation beyond growth. In another version of a similar idea the regime shift is located at the turn of the new decade of the 2020s, which can be seen as the end point of a 40-year-long period of ‘national innovations systems’ and the beginning of a new ‘frame’ focused on sustainability and large-scale problem-solving (Schot and Steinmuller 2018).

The important thing here is the commonality in thinking of the functions of knowledge as wider and richer than the instrumental technological and economic justifications that dominated in previous periods. Still, a word of caution is appropriate. Alternative agendas for research policy have been presented before, and not lasted. For example, in the wake of growth-critical environmental concerns in the years around 1970, when such ideas enjoyed a moment of concerned attention in international organizations, the UN system, and even the OECD where a radical report was released (Brooks 1971). At least in the OECD the moment passed fairly quickly (Schmelzer 2012, 2016; Borowy 2019) but environmental and other ‘alternative’ approaches to science policy have always played a role, albeit not a hegemonic one. It may be that the case for the ‘alternative’ has now, at the beginning of the Agenda 2030 decade, reached a more mainstream position in the face of world events and is closer to becoming a guiding framing of investment in research and innovation.

8.6 KNOWLEDGE OF THE HUMANITIES

This general shift in the policy climate has served as a major impetus for change in the humanities as well, with early expressions from around 2010 (Hulme 2011; Castree et al. 2014). One of the ambitions was to bring expertise from the humanities closer into the circles of advisory work, where it had been underused, but also underdeveloped, compared with expertise in science, technology and medicine. This is unfortunate, since the ‘grand challenges’ are challenges to society rather than to environment or climate, which is often cited as most at peril. The real shortcomings are in society, and it is these that ultimately impact negatively on the planet and on life. In return, the damage affects society; or, as political scientist Bo Rothstein expressed it: ‘Human suffering is not caused by a lack of gadgets or too little technology; it is caused by dysfunctional social institutions’ (Samuelsson 2012, p. 5). The kind of advice that is needed is therefore one that can talk about how societies and their institutions function and how they can change, a work that will have to include societal values and ideas, and thus be the opposite of ‘dispassionate’ (Brysse et al. 2013; Oreskes 2013). It would need to comprehensively formulate the conditions and scope for research policy in new ways. It would also need to mobilize more types of experts, and work towards an integrative mode of thinking across different areas of policy and expertise.

This speaks strongly in favour of knowledge from the humanities, and it is now less easy to dispense with. There are also rising opportunities to articulate the synergies between arguments from the natural sciences and the human sciences. Natural science has in many areas advanced well enough to be able to express the challenges clearly, be they climate, food security or biodiversity (Dasgupta 2021). More of such knowledge is always useful, but few believe

that some marginal refinement in the analysis of what is causing climate change will bring us closer to resolving the climate crisis. Nor does anyone believe that the society we have created can curb the pace of its species extinction just because we learn yet another incremental fact about biodiversity, or encounter a newly discovered species, however great that is in and of itself. Knowledge based on natural sciences is necessary but not sufficient. It is fundamental, but it is not enough for managing complex challenges, and this applies not only to societal issues (education, infrastructure, media, inclusion, equity, etc.), but also when it comes to climate and environment, health and technology.

This line of thinking that is now on, or perhaps already across, the threshold of influence has matured over a period of a couple of decades. In his book *Politiques de la nature* (1999), French sociologist and science and technology studies (STS) scholar Bruno Latour insisted that nature should not be perceived as a reserve for research in the natural sciences, any more than in the humanities or social sciences. Nature must, Latour argued, ultimately, be made accessible to democratic considerations. Facts must of course be respected for what they are, but at the same time, facts and values must be actively mixed since nature is not just 'natural' but also part of the social reality that we human beings are both responsible for and want to achieve something with, namely, an Earth system that is not violated and can maintain a stable climate and rich biodiversity.

Bruno Latour, and many others (Sheila Jasanoff, Bryan Wynne) who have commented on the science-nature divide from a policy perspective, have their roots in STS research. Starting with studies of one of the primary sites of scientific production, the laboratory, Latour has successively extended his domain to posing questions about how to make a new scientific project feasible. This is a project that seeks to broaden the actual remit of science and scholarship as a societal enterprise. Research, including the kind that is justified by its 'environmental benefits', often has fairly short-term instrumental motives that are weighed against others in a kind of internal priority discussion. This is, of course, a reality and still profoundly characterizes our societies. But for Latour a completely different order looms on the horizon – one in which military and commercial considerations have receded into the background, and the endeavour to set up a sounder total societal metabolism, encompassing a fair and sustainable circulation of Earth's resources, has come to the fore.

This vision from around 2000 has helped bridge reflexivity on the 'future of nature' (Adams 1996) and environment with that of the future of the scientific enterprise. It took some time until the bridge building entered the language of conventional research and innovation policy language, but when it did it also paved the way for a new logic for the humanities. There was, Latour argued, no sense in separating the missions of the different knowledge bases. They would

all share in the overarching aim of assisting Earth system balance, or, as Latour would say in the the 2010s, ‘Gaia’ (Latour 2018; Latour and Lenton 2019).

8.7 CLIMATE CHANGE AS A CATALYST

So, as the 20th century came to a close, a different set of complexity arguments was already beginning to shift the focus of knowledge politics. One of the most significant of those was the climate crisis. Not only was the growing political and public recognition of the problem of human-induced climate change around the turn of the 21st century a crucial force in the emergence of the challenge-driven research agenda. Global warming also transgressed some of the most fundamental divides of the modern organization of knowledge. It challenged deep-seated perceptions and ideas about the demarcation not only between disciplines but between culture and nature. In terms of spatial and temporal scope, it called for nothing less than thinking on a planetary scale and a far-reaching reconceptualization of cross-temporal links and interdependencies (from a rich literature, e.g. Chakrabarty 2009; Edwards 2010; Bonneuil and Fressoz 2017; Ekström and Bergwik 2022), suggesting new ‘synchronizations’ of multiple times (Koselleck 2002; Jordheim 2014), a ‘temporal thickening’ of the present (Ekström 2016b) and the emergence of, literally, ‘enviromental times’ (Sörlin 2022). Also, in response to the fragmenting experience, the dawn of a new geo/historical epoqe or period – geologists debate its proper temporal designation – was suggested at the very turn of the century (Crutzen and Stoermer 2000). Regardless of its historical and theoretical merits, the concept of the Anthropocene articulated and helped frame a growing cross- or postdisciplinary unease with the modern knowledge system, both in its epistemological and institutional aspects (Ekström and Svensen 2014; Sörlin 2018a).

In relation to knowledge policy regimes, the public recognition of the climate crisis was of great influence in fashioning the more general idea that a new order of complexity was typical of the challenges facing complex capitalist societies. This development further propelled the institutional changes that also involved the humanities. The logic of complex challenges – that had been the mission of scientific advice and problem-solving since World War II – gave way to a logic of complex societies by which knowledge politics become engaged with issues of long-term infrastructures of knowledge, value creation and the ‘extra-disciplinary’ responsibilities of knowledge institutions. The requirements that this analysis placed on knowledge environments were also transferred to the requirements of life more generally in the 21st century. It could even be questioned whether scientific knowledge was enough to deal with the challenges. Suggesting a decline of US public universities, Christopher Newfield argued that ‘climate change, overgrown financializa-

tion, and continuous warfare’ were examples of problems that ‘require interdisciplinary expertise, hybrid methods, and continuous creativity on the part of the whole population’ (Newfield 2016, p. 5), a point echoed by many (e.g. Williams 2019).

We should not fool ourselves to prognosticate a unison move into a new progressivism under the sheer pressure of planetary challenges and systemic shocks. Historical change is messy and unfolds in multiple directions and at different speeds. Many of the struggles that define the climate crisis, such as the burning of coal, forest management, and conflicting interests of industrial exploitation and attention to local environments, have been immanent to Western economic, legal and political systems for more than 200 years (Bonnieuil and Fressoz 2017). This is also an area where knowledge from the humanities is indispensable. To be able to act on emerging complexities, current societies need to advance their knowledge about time and intertemporal connections, and imagine life in the 21st century through temporalities that go beyond modern presentism (Ekström 2022a).

8.8 THE SIGNIFICANCE OF SCALE

The contradictory nature of historical change is also visible in the overlapping regimes of policy discourse on both a national and European level, where the idea of the knowledge economy, and its innovation-for-national-growth perspective on the societal value of knowledge production, continues to exert a strong influence. Indeed, this tendency of current research policies of speaking with two tongues is expressed already in the title of the above-mentioned Swedish government’s research bill, *Kunskap i samverkan – för samhällets utmaningar och stärkt konkurrenskraft* (Swedish Government, Prop. 2016/17:50) (‘Collaborating for knowledge – for society’s challenges and strengthened competitiveness’).

The best explanation to this seeming paradox – trying to address the transformative challenges of the early 21st century with the flawed repertoire of late 20th century capitalism – is probably that this is how normal politics works (and perhaps should work), moving forwards and backwards by negotiating contradictory interests, motivations and concerns. What we should look for in such documents is a certain preparedness to introduce new priorities, ongoing shifts of balance between coexisting discourses, and adjustments of previously set priorities. In this respect, there have been important changes in the direction and overall emphasis of knowledge politics over the last decade, in Sweden and elsewhere, not least in the EU where the spirit of the EU Green Deal, from December 2019, reinforced by the crisis Recovery Agreement of July 2020, will likely significantly influence the Union’s research budget for 2021–27,

which, although possibly shrinking somewhat in comparison to the previous will have a more transformative profile (ERC 2020).

But there is another aspect to this ongoing clash between policy regimes that concerns the changing nature of the challenges themselves. This aspect is related to matters of scale. The notions of the knowledge economy and the challenge-driven research agenda operates on completely different temporal and spatial premises. While the linear models of late 20th century innovation thinking focused on short-term economic effects of research investments on a national scale – typically obscuring knowledge production in sport and market metaphors – the more recent focus on societal challenges is concerned with local manifestations of long-term processes on a global and planetary scale. The shifting complexities of knowledge politics are thus also related to shifting geographical scales and temporalities, and with them to new thinking about the sharing of consequences and responsibilities.

Today, this aspect is more relevant than ever. Contemporary societies around the world are increasingly confronted with problems that are characterized by their complex temporal nature. Climate migration, accelerating economic and social polarization, and the ongoing disintegration of public institutions are all problems that are rooted in slow processes and structural changes that now surface in open and violent conflicts. The importance of scale is temporal just as much as it is spatial. There is no longer a choice between the concern with the short term or the long term, they are increasingly identical. In terms of policies, this requires an equal focus on institutional and infrastructural matters as on the immediate manifestations of such processes – an understanding, that is, of the necessary activism and growing actuality of the long term as a key feature of life in the 21st century (Ekström 2016a).

So, in summary, it is in response to the transitional nature of these combined changes and challenges that a third policy regime is taking shape. To some extent it has to connect with the directions and concerns of the earlier regimes. But its complexities are different. One important element of the work to transcend the scales of the economic and national orientation of the late 20th century notion of the knowledge society is of an imaginative nature. Today, the cultural work of envisioning routes for progressive futures through coherent narratives of this profound shift of scales is equally vital in relation to the threats to democracy as to the pressures of global warming. This political practice of the imaginative powers involves analytical work that goes beyond the disciplinary and epistemological divides of the modern knowledge system. It needs to be value-oriented and deeply historical and yet transcend the idea of the cultural as separated from the natural. How should we imagine and support the creation of research environments that might comprise this development?

8.9 INTEGRATIVE NICHEs IN THE MAKING

The history of scientific knowledge is often described as a continuous process towards increasing specialization, fostering an expertise based on the production of more complex and therefore narrow knowledge. The development of the modern disciplines, many of them rooted in the 19th century and institutionally framed in the early 20th century (Stehr and Weingart 2000), works both as a prerequisite and a goal for this version of the history of knowledge, fuelled as it is by idealized directions and legitimizing motivations. Late in their history, disciplines sometimes appear like disintegrating empires, more and more oriented towards their own history and protective of their foundational myths and moments. In this respect the natural sciences are no different from the human and social sciences.

However, if complexity is understood as a feature of the problems that research can address, and not as an intrinsic quality of disciplinary knowledge itself, it becomes important to create environments where specialized knowledges are combined with a commitment and reflexive ability to interact with multiple approaches and forms of expertise. But this is not how academic disciplines typically work. They gather people who know similar things, pursue similar methods, and whose research is informed by similar theories. In terms of incentives, the reward systems of modern academia are also to a large extent designed to enforce narrowing modes of specialization within disciplinary frameworks. What we argue for in countering the self-fulfilling rationale of this model is not to replace the notion of disciplines with any general model of inter-, trans-, multi- or some other form of plural disciplinarity. In fact, if any aspect of disciplinarity is relevant to emerging and more integrative models for gathering and scaling research it is in the negative sense of ‘dedisciplining’ the contexts of relevance and environments for research and knowledge politics more generally.

Obviously, these matters can also be worked on by changing the incentives of academic knowledge production. Currently, there is an important move towards broadening impact definitions in research and higher education policies. In the humanities there are many reasons for developing thicker descriptions of the way its knowledge travels and connects with other institutions and contexts of relevance. One is to change the self-conception of many humanities students and their teachers of being comfortably isolated on the margins of the infrastructures of knowledge. Another is to expose its offerings in a time when issues of post-capitalist value formation and the reimagination of civic life are increasingly foregrounded in response to urgent social and cultural pressures. Recent attempts of mapping the impact of the humanities contribute to this by enriching the understanding of its broader resonances in society, although,

strange as it may seem – but not so strange considering the de-prioritizing policies – the social influence of humanities, and their publishing strengths, have not been very well captured in comprehensive analysis (but see Myhre 2011; Benneworth et al. 2016; and Sivertsen 2016a, 2016b for Norway; Johansson et al. 2018 for Denmark; Salö 2021 for Sweden; and Kulczycki et al. 2018 for a European overview). Also, this work feeds into a growing and revitalized concern with the role of knowledge and its institutions as a distinctively public infrastructure in well-functioning societies (Ekström 2022b).

Here, however, we would like to point to another aspect that we think of as decisive and perhaps even more important than changing incentives and impact definitions. This is the role of the plethora of various new integrative niches that have already emerged in universities around the world in the last two decades (Ekström and Sörlin 2016). We may think of these niches as policies in the making. They are ideally characterized by an improvising ethos, less occupied by disciplinary considerations, and share a focus on problems too complex to be approached within established frameworks. They are collaborative in design and responsive to different knowledge contexts both inside and outside of academia. Institutionally, and especially in old-school universities, they depend on university leaders that understand the importance of fostering plural and parallel structures that enable synergies between them and local mobility among researchers.

But the main impulse of creating these environments stems from individual initiatives and groups of scholars who despite all differences of intellectual orientation and collaborative set-up share some distinctive characteristics. This is the commitment to outstanding research capable of resonating with different specializations, an ability to bridge communicative and scientific work, and a guiding sense of public responsibility. Indeed, this could be described as a composite mode of specialization that the current complexity regime requires (cf. Ekström and Sörlin 2012, ch. 6). It is unified not so much by a single institutional model as by a shared ethos.

8.10 INSTITUTIONAL TYPES AND CONTEXTS

Indeed, the overall organization and institutional history of the humanities was never as homogeneous as the lore and traditions of classical disciplines imply. In relation to the last 50 years, bearing in mind that the institutional trajectory of the social sciences was different in many respects, it may be useful to distinguish between four influential types of non-disciplinary centres and institutes for humanities research.

Among the oldest are the institutes of advanced study (Wittrock 2003). They are typically organized around individual fellowship programmes (e.g. IAS in Princeton, New Jersey, or SCAS in Uppsala, Sweden) and sometimes

encourage work on a temporary thematic focus (Durham in the UK, STIAS in Stellenbosch, South Africa). Some institutes of advanced study offer programmes both for individual scholars and small groups (NIAS in Amsterdam, formerly Wassenaar in the Netherlands, CAS in Oslo, Norway), which in some cases are designed to connect local scholars with far-off colleagues. Many of these environments invite scholars on sabbatical or in the process of finishing off major writing projects. This type of institute therefore strives to offer a certain amount of seclusion with limited external interactions. The institutes of advanced study also organize networks and programmes between them, for example, through the Network of European Institutes for Advanced Study (NetIAS) and their joint fellowship programme (EURIAS).

A second model is the tradition of humanities centres and humanities research institutes in North American universities. Some of these environments have a long history, for example, at Johns Hopkins (Baltimore) and Stanford, going back to the 1970s and early 1980s, and with the Center for the Humanities at Wesleyan University being the oldest, founded in 1959 (Thompson Klein 2005, p. 76). Some of these centres have changed their direction and institutional identity over time, for example, in connection with endowments and changing priorities within the respective universities. Others are designed for being located in particular institutional contexts such as the multicampus unit University of California Humanities Research Institute (UCHRI), which was founded in 1987. A common mission throughout the history of humanities centres has been to facilitate and foster interdisciplinary exchange within the host university by offering internal fellowships and support for organizing seminars and workshops (Berkeley, Stanford). In some instances, the centres hold common resources for humanities research such as collections, archives, databases and other infrastructures (Svensson 2015).

Unlike the model of institutes for advanced study, the humanities centres and institutes are further characterized by a strong public orientation with lecture series, programmes for cultural engagement and creative fellowships as well as various initiatives for the communication of humanities knowledge (Harvard). Throughout their history, there is also the recurrent idea that these institutes have an important role in providing a humanities-based initiative for interfaculty conversations across the human, social and natural sciences. Today, this mission strongly resonates with crucial epistemological, institutional and political concerns. But it is rooted in older generalist models and ideals, such as the liberal arts tradition, which the model of humanities centres was designed to promote from the very beginning. The history of these institutions therefore reflects a recurrent tension between the emerging disciplinary cultures in the 20th century and alternative ways of organizing knowledge in the modern era.

A third type of institution is the increasing number of humanities research institutes in universities in other parts of the world. Focusing on European universities, there are as many similarities with the North American model as there are differences between individual institutes. Some centres, for example CRASSH at Cambridge, combine a focus on the arts, social sciences and humanities. It is organized around a similar mission statement and mix of activities and programmes as its North American equivalents, but it is different in terms of funding structure and how it sits in the university. But this is not representative of the development of humanities research institutes in many younger and smaller European universities. There has been a drive towards institutional change and fusions affecting the humanities, which was influenced by different motivations such as administrative efficiency and financial cuts. In some universities and European countries, this has turned interdisciplinarity into a strategic tool for securing scale in humanities research and education in times of diminishing resources and changing priorities. The conflicting rationalities that operate in this development have resulted in a very heterogeneous grouping of humanities institutes and centres around Europe. Nevertheless, there is a sense of connection and shared initiative between many of these more recent institutions. This is also manifested by the Consortium of Humanities Centers and Institutes (CHCI), which organizes humanities research institutes globally.

A fourth type of institute is typically organized around a multidisciplinary theme, which often reflects past strategic initiatives and political priorities. There is a multifaceted history of area- and sector-specific research institutes, especially in the social sciences but to some extent also including the humanities. In Sweden, the history of independent research institutes centred on, for example, social policies, health issues or urban and regional development is strongly connected to the knowledge politics of the 1950s and 1960s, and the institutional ties that developed between social research and the emerging institutions of the welfare state. As discussed earlier, this development reflected the separation between the human and social sciences, and became part of the marginalization of the humanities while the social sciences continued to expand in the 1970s and 1980s through various politically initiated but institutionally independent research institutes. A similar development influenced the orientation of some of the new universities and university colleges that were founded in Sweden in the 1960s and 1970s, some of which developed around thematic studies and regional needs rather than the disciplinary structure of older universities. However, the general impact of the humanities was marginal in these environments and has largely remained so.

But there is another type of institute that comes closer to and in many ways feeds into the integrative niches that we currently see emerging. This is what is best described as environments organized around interdisciplinary or postdis-

disciplinary specializations. Unlike the politically initiated and independent institutes, this is a group of research institutes that are typically integrated into the university model. They are equally connected to broader social and political concerns and to the development of shared concepts and theoretical discourses between various disciplines. An earlier generation of such centres were typically organized around areas of 'studies', for example cultural studies, gender studies, and science and technology studies. Shaped in the context of critical theory in the 1970s and 1980s, these areas were also characterized by their way of bridging the social and human sciences. In the last decades of the 20th century, this development influenced not only the creation of interdisciplinary research centres but a diversity of study programmes, journals and conferences.

It is an irony that interdisciplinary specializations often end up in disciplinary strivings. In the early 2000s, a new generation of cross-disciplinary research areas emerged within the humanities. This development is exemplified by the fields of digital, medical and environmental humanities, or geo-, techno- or climate humanities to mention a few other more recently emerging fields, often with a distinct history component, as this very large core humanities discipline has been opening up to, first, multiple subdisciplines and more recently to cross-cutting innovations related both to the third research policy regime, as described above, and to the emerging new Anthropocene *Weltanschauung* (Sörlin 2018b). The guiding impulse of these integrative humanities fields was a new and distinctively postdisciplinary challenge orientation. How this will affect their future modes of operation is still however an open question; this is an ongoing evolution. What is important in the context of this chapter is that this development sparked a wave of hubs, labs and institutional niches in European and North American universities in the first decades of the 21st century. Many of these environments have also become nodes for conversations and collaborations between the humanities and the social, technical, medical and natural sciences. They reflect the ongoing shift in the organization of knowledge and work as an institutional avant garde in the experimental formation of future models of integrative knowledge.

Among these institutions we find many of the – mutually quite dissimilar – units that practice the integrative and transformative humanities. This is a general trend in many parts of the world and seems to generate a gathering of combined humanities expertise and typically with a name or a label that signifies the particular kind of integrative humanities that is the focus of the centre: environmental, medical, digital, energy, conservation and so on. This plays out differently in different institutional settings. In specialized professional universities – technical, medical – the integrative humanities can have a prominent position and, not encountering much institutional friction, gather significant portions of the human science activities. In other instances, integrative centres or programmes, or research initiatives would rather find their

niches among a set of existing disciplinary departments and other centres and may serve a cross-cutting function involving many of those. In some cases an entire faculty or school can serve as the host institution.

Three European examples from the environmental scene may illustrate the ongoing trend. The Rachel Carson Center at Ludwig-Maximilian-Universität in Munich, focusing on environmental history and environmental humanities, hosts an international visiting scholars programme and teaches masters and PhD students. The KTH Environmental Humanities Laboratory, embedded in the Division of History of Science, Technology and Environment at the KTH Royal Institute of Technology, Stockholm, has a strong research focus, including PhD training, and is challenge driven (e.g. migration, climate, media, governance, urban studies). The Oslo School of Environmental Humanities (OSEH), comprising three large departments for languages, classics, archaeology, history, arts, and ideas in the Faculty of Humanities of the University of Oslo, draws on a broad range of specialities and offers integrative humanities on environment and climate for students with all kinds of backgrounds. Typically, all these initiatives are from the 2010s.

When technology or infrastructures are a driving force, as in digital humanities, the formation of new interdisciplinary specializations tend to be more common. When broad knowledge areas/disciplines such as history or philosophy form the basis specializations will be less common. They teach and research, just like any department but on their challenge- and problem-oriented remit, and they all do communication and outreach, typically with a higher intensity than most departments of a similar size. There is no uniformity, and it is too early to tell where these developments are going. The common denominator is that most of these units qualify on all three integrative dimensions: interdisciplinary, modular and societal.

8.11 MOBILIZING THE HUMANITIES

The competitive incentives of late 20th century policy regimes supported and reinforced a combination of economic and quantifying criteria of research excellence. This did not counteract old-school disciplinary formation or a technological quick-fix approach to social and political matters. Today, however, it has become necessary to systematically distrust the claims of any emerging specialization to provide alone the solution to complex problems. This is also true for institutional models.

There is no singular formula for creative research environments. On the contrary, university leaders should think less of optimizing organizations and more about how to animate institutions. Responsible policies start from an elaborate understanding of knowledge itself as an infrastructure in society. It systematically models universities as plural structures. Regarding the human-

ities, such policies especially consider aspects of scale and work on synergies to increase its impact on contemporary social and cultural pressures.

We should obviously not expect the human or social sciences to provide solutions to such pressures to any higher degree than we expect the technical sciences to solve the climate crisis. What we do argue, however, is that the humanities – and more so than the social sciences – are in the position of taking a central role in fostering an integrative ethos and direction in contemporary knowledge politics. One reason for this is the prevalence of models for such work in the history of the humanities and what we might think of as a tradition of responsibility for the public resonance of knowledge production. Another is that the humanities, as an effect of its relative marginalization, have been comparably unaffected by narrowing economic and bibliometric incentives. At the same time, this has conditioned an inward-looking and protective attitude in many of the traditional humanities disciplines. For more than half a century, following the expansion and restructuring of knowledge bases in postwar Europe, this created a strong predominance of reactive and deconstructive styles of critique in the humanities.

But critique is never enough. It has become increasingly important to articulate a better understanding of the contribution of the humanities in areas where different forms of expertise need to interact. Any effort of intervening in questions of institutional reform and the long-term organization of knowledge in society also requires a different mode of critique. What is needed is not a reactive framework but multiple, generative and experimental approaches. Another crucial element to strive for and support in emerging integrative environments is a sense of activism not only in relation to shared research concerns, but to the role of such niches in elaborating models for public space and the formation of public values. The collaborative and improvising ethos of many of these initiatives is therefore not limited to their scientific productivity but is also related to their capacity for innovation regarding new forms of interaction and communicative practices. In this respect, integrative environments also have the potential of becoming pockets of critical responsiveness towards broader aspects of the role of universities as inclusive and distinctively public institutions.

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