Depicting and researching disciplines: strong and moderate essentialist approaches

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This paper considers how the idea of 'discipline' can best be conceptualised, both in general and particular terms. Much previous research has employed a strong essentialist approach, a model of disciplines which exaggerates the homogeneity of specific disciplinary features and accords disciplines generative powers which they rarely possess. That approach is disabling because it closes down the appreciation of the heterogeneity within disciplines, as well as occluding the reasons for that heterogeneity. However, for researchers this oversimplified model offers the attractions of simple research questions and research designs. The consequence of using such a model is, though, that its distortions threaten the robustness of higher education research. The paper argues for a more sophisticated conceptualisation of disciplines, one which deploys a moderate form of essentialism. It applies Wittgenstein's notion of family resemblances to the task of depicting disciplines and explores the implications for research of this more nuanced model.

Keywords: disciplines; research; essentialism; higher education; family resemblances

Introduction

This paper argues that much of the literature on the nature of disciplines in higher education has adopted a strong essentialist position, usually epistemological essentialism, and that this is disabling insofar as it closes down an appreciation of the complexity of disciplines as a whole and of individual examples of them. It also occludes the mechanisms at work which result in heterogeneity and dynamism within disciplines. However, the paper does not retreat to a relativist 'voice' argument (Young 2000, 2008) which says (in summary) that a discipline cannot be captured in generalised terms but is, rather, little more than what its practitioners say it is. Instead the paper commends a moderate form of essentialism for having both descriptive and heuristic power. While strong essentialism (as seen in, for example, biological essentialism or African essentialism) is unhelpful and disabling, a moderate form of essentialism is valuable, even necessary, in the study of social science.

Essentialist views of disciplines: strong and moderate

A strong version of essentialism as a concept involves two things: the claim that a phenomenon has a definable and necessary character, an essential property or properties

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which distinguish it from other phenomena, and that these characteristics have generative power; that is, their presence significantly affects other phenomena around them.

To take each of these characteristics in turn and apply them to disciplines: the first strong essentialist feature is that it posits that the concept of 'academic disciplines' involves a unique set of characteristics at its core which situates it as being clearly itself, and not for example belonging within another concept or category such as 'hobbies'. Further, each particular example of a discipline within that category has unique identifying characteristics which mark it as being itself, for example being sociology and *not* anthropology.

There are a number of examples of this approach as Krishnan's (2009) account of different theoretical 'takes' on disciplines demonstrates. Janet Donald echoes earlier examples (e.g. Berger 1970) in demonstrating this kind of thinking in her definition of academic disciplines which, she says, have:

> a body of knowledge with a reasonably logical taxonomy, a specialized vocabulary, an accepted body of theory, a systematic research strategy, and techniques for replication and validity. (Donald 2002, 8)

The position adopted in this paper sees this as a disembodied, abstract notion of disciplines, one which floats in the ether. Giddens (1976) points out that if we look for *social structures* we will not find them, because they do not exist independently of their articulation in practice. Similarly it is not possible to capture disciplines as abstract entities. Disciplines become apparent in their playing out in the world, in the process of institutionalisation and in the discursive and other practices which give them substance.

The university, the site of the articulation of disciplines, is absent from such abstract definitions as Donald's, as is the dynamism that disciplines display: growing, morphing and splitting (Clark and Neave 1992). In that dynamic process fundamental precepts become challenged by internal debates, new theoretical approaches develop, and new questions arise and new research strategies and techniques are deployed to answer them. This definition is also challengeable even on its own terms: by this definition one might say that astrology is a discipline (the issues around techniques for replication and validity being highly debatable there, just as in some 'accepted' disciplines).

This problem of abstraction in describing disciplines is present too in Bernstein's (2000) concepts of vertical and horizontal structures and discourses. Bernstein claims that disciplines differ inherently in relation to their ability to achieve greater and greater levels of generalisability: vertically structured ones can achieve generalisation, horizontally structured ones cannot. They also differ in the degree to which their claims can be corroborated against reality: they have a strong or weak language of description, or 'grammaticality', according to Bernstein. Verticality or horizontality tend to be aligned in any one discipline, he argues. Like Donald's definition, this is an abstract account, demonstrating the first element of essentialism through its argument: that phenomena have intrinsic, essential, properties. Critics have shown that moving beyond this level of abstraction reveals a much more complex, and contradictory, situation with regard to disciplines, and have criticised Bernstein for adopting a dualism that obscures more than it illuminates (Moore and Muller 2000; Penrose 2006; Young 2008).

The second characteristic of essentialism, its generative power, is very evident in the *Academic Tribes and Territories* framework originally set out by Becher (1989) and subsequently modified in Becher and Trowler (2001). This argued not only that each discipline has particular and essential knowledge properties, but that these properties

are generative, in a direct and universal way, of specific cultural characteristics among disciplinary practitioners. It posited the driver of disciplinary cultures as being the structure of knowledge within each discipline. These knowledge drivers, that argument ran, resulted (or would result) in distinctive tribal characteristics within each discipline that would be found across the world. This even extends to leisure-time: 'physicists were inclined towards an interest in the theatre, art and music, whereas the engineers' typical leisure activities included aviation, deep-sea diving and "messing about in boats"' (Becher 1989, 106).

Other authors followed this line, or developed a similar essentialist one themselves. Neumann, for example, argues for a 'strong influence of disciplines on academics' beliefs, on teaching and on students' learning' (Neumann 2001, 144) and tried to specify the distinctive characteristics of practices in different disciplines with regard to learning and teaching, generated by differences in their knowledge structures:

> In considering educational goals … hard disciplines [such as physics] place greater importance on student career preparation and emphasise cognitive goals such as learning facts, principles and concepts. Soft areas [such as English] place greater importance on broad general knowledge, on student character development and on effective thinking skills such as critical thinking … Soft pure fields placed greater importance on creativity of thinking and oral and written expression, while hard pure and hard applied fields placed strong emphasis on ability to apply methods and principles … Hard areas require memorisation and application of course material, while soft disciplines are more likely to have exam questions requiring analysis and synthesis of course content … (Neumann 2001, 138)

Donald did likewise:

> Psychology professors talked of developing students' capabilities through a series of courses which focus on different methods … In education, case studies are seen as important instructional methods to aid students in making complex situations coherent. English literature professors paid attention to the analysis of text to determine the underlying assumptions … and they were concerned with the development of argument in their courses. (Donald 1995, 16)

Strong essentialism, with its twin requirements, is conceptually limiting as is the reductionism and determinism that usually accompany it. But this should not lead to a thoughtless rush to relativist constructionism which dismisses regularities in social life and the possibility of going beyond only contextual accounts (Young 2000). A nuanced depiction of academic tribes and their territories recognises that disciplinary territories do not directly and singularly have behavioural effects, and the behaviours we see amongst academic staff are a result of the emergent properties of a combination of factors. However they are *not* chaotic, nor are they only the productive of constructive processes occurring locally. They have regularities and are constrained in particular ways. A nuanced ontology goes beyond rigid categorisation and offers accounts of social life which recognise impermanence, conditionality and the significance of different ontological strata. A moderate essentialist position can offer this kind of ontology, and the next section of the paper goes on to explicate this.

A revised position

The position adopted here is that, firstly, the category 'discipline' does not have a set of essential characteristics which are all necessarily present in every instance. Secondly

that each *individual* discipline has no essential 'core characteristics' either, in the sense of being all present and identifiable at all times. Finally the paper argues that the generative power of disciplines, the power to affect other phenomena in significant ways, does exist, but is more like the power output of a wind turbine than that of a power station. In other words it is variable and contextually contingent. Such a position has 'practical adequacy' (Sayer 1997, 2010), that is, it is usefully illuminating and can actually be applied in research and other areas of practice.

The generative power of disciplines waxes and wanes over time, both long and short term, and between contexts and sites of practice. As a result it is not possible to make any general statements about this power other, perhaps, than saying that it has declined as a force generally over the past three or four decades. It is not surprising that the accounts of the nature and extent of the generative power of disciplines in the literature display considerable variety in their claims. They vary in the claimed scope of this power into other areas and in its strength. The descriptions used vary from fairly weak words such as 'preferences', 'styles', 'rituals' and 'tendencies' through to firmer ones such as 'approaches' or 'practices'. This lack of agreement stems from the fact that generative powers are not consistent over time, place or context of expression.

If the metaphor of 'territories' still has any purchase, then what that term encompasses in the twenty-first century needs to go well beyond the epistemological structures of disciplines (its original use) and to incorporate the many other factors which condition academic cultures. Technologies, ideologies, marketisation, globalisation and the rise of the evaluative state among other forces at play condition, in their interactions, how academics behave.

To put flesh on the bones of those statements the paper deploys Wittgenstein's (1953) notion of 'family resemblances'. This offers a conceptual foot-hold in understanding how moderate essentialism can work in the way just described. Wittgenstein points out that different members of a human family display a cluster of features which are significant to that family. Not everyone in the family shares them all, yet they *are* recognisable as family members. The same is true of some categories of phenomena which belong in the same 'family' or genre, for example that of *games*. One game may have features in common with a different type of game, but lack that commonality when compared to another type of game. Nonetheless we recognise them both as 'games'; chess and poker, for example. Generally it is possible to distinguish 'games' from 'sports', but as in other instances where categories are close, there are sometimes cases in which distinctions are blurred; golf, for example. This is also true of disciplines as a category and true too of different instantiations of the 'same' discipline in different contexts. So academic historians, for example, may display very different characteristics in different universities, though there are still some common features between them which render them recognisable as 'historians'. Wittgenstein's account is a moderately essentialist one in this respect: it argues that phenomena have objective defining features but does not require them all to be present in every instance.

If variability in characteristics, within limits set by a pool of possible features, is the first feature of family resemblances, a second is that the resemblances can be different at different levels of analysis, in different 'ontological strata' (Sayer 1997). Like the first, this demonstrates the moderate essentialism of the Wittgenstein's argument. Applied to disciplines it means that viewed from a distance they may seem to have certain common characteristics, but viewed close up those characteristics crumble in the analytical hand.

Meanwhile at that level other resemblances across disciplines come to the fore. In short, granularity matters.

Academic law, for example, when viewed close up can have characteristics that are closer to gender studies than to other approaches to academic law: critical legal studies is very different from black letter law, though both can exist side-by-side in a law department (Cownie 2004, 2012). Disciplines are the site of struggle of competing viewpoints, the site of power plays: what Bresnen and Burrell (2012) describe as Mode O (in contrast to the better-known Mode 1 and Mode 2: Gibbons et al. 1994; Nowotny, Scott and Gibbons 2001, 2003). There are often more similarities than differences between, say, critical legal studies and sociology, with greater divisions inside academic law (at least as articulated in some places) than there are between those two disciplines. Strong essentialist accounts flatten out internal differences and occlude complexity. Nonetheless, we should not confuse essential properties and accidental properties: there can be huge differences in the accidental properties of, say, academic law, but it still *remains* academic law as long as it shares some familial resemblances with other articulations of that discipline (considered at a particular ontological stratum and in particular relational context) are in place.

Thirdly, family resemblances can be different in respect of different sets of relations. So disciplines as articulated in a research context are different than when articulated in learning and teaching contexts. This distinction is key in Bernstein's notion (2000) of the pedagogic device and his distinction between *discipline as research* and *discipline as curriculum*. Bernstein counsels us to pay careful attention to the *site of practice* of a discipline and notes how a process of recontextualisation occurs as disciplines become translated into pedagogical practices and pedagogical discourses through the operation of three sets of rules: distribution rules; recontextualisation rules; and evaluative rules. The distribution and recontextualisation rules together provide an account of how disciplinary knowledge practices are situated differently in teaching–learning interactions than they are in research practices (Bernstein 2000; Maton and Muller 2007; Ashwin 2009). The distribution rules order the regulation and distribution of what counts as worthwhile knowledge in a society, determining for example what is and is not eligible to count as 'English Literature' and be included in syllabuses in that discipline. The recontextualisation rules render disciplinary knowledge into a form amenable to being taught, and learned, for example in textbooks. The evaluative rules offer different principles from those for research on which to judge these new pedagogical practices, setting out what is and what is not acceptable as an assessable piece of work, and what the standards are. Academic teachers in interaction with their students 'translate' the above rules into rules for the production of legitimate text by students and the evaluation of that text. This involves teachers and student interpreting the curriculum produced by the recontextualisation rules. Even within discipline as curriculum, detailed enactment will vary: academic architecture as articulated in the lecture theatre is not the same as that articulated in the field, in discussion with clients or at the drawing board or computer (Winberg 2003, 2012).

To Bernstein's 'discipline as research' and 'discipline as curriculum', we can add other sites of practice within universities such as the committee meeting, individual negotiations, and practices associated with income generation. In these cases and others 'what the discipline is' is also recontextualised and rearticulated, just as in the sites of teaching and research. It takes new forms but retains at least some familial resemblances to other forms. Often the discipline will be used as a form of symbolic capital (Bourdieu 1984), deployed to provide authority to claims for resources. The

nature of 'the discipline' in research practices is recontextualised when academics turn to learning and teaching, and recontextualised again in committee meetings, practices associated with winning funding, and so on. In short, disciplines are socially situated (Mathieson 2012). So, in this view, 'disciplinary practices' should be seen as unstable, contextually contingent and shaped by multiple strong forces.

We can also say that disciplines are expressed very differently in different locales even in equivalent sites of practice. So, sociology as expressed at the Università Cattolica del Sacro Cuore in Italy is very different from that at the University of Lancaster in the UK and both different again from its expression at Rhodes University in Grahamstown, South Africa. Moving between contexts such as those will leave the observer with impressions that are at once familiar and strange: there will be things they recognise and things that surprise about the articulation of disciplines in these different contexts. (See Ashwin, Abbas, and McLean 2012 for a developed illustration of this point.)

Finally, the characteristics of family resemblances are dynamic: they change over time yet retain recognisability. To stay with Wittgenstein's 'game' example, technological developments have brought about completely new forms of games with characteristics unknown previously, yet we still recognise them as games (as in video game retailer 'Gamestation'). Similarly a particular discipline can change very markedly over time, but it is still 'the same' discipline. This illustrates how a moderate form of essentialism does not assert that the distinguishing features of a phenomenon such as disciplines are permanent, at whatever ontological stratum one views them.

The family resemblances concept allows us to adopt a view of disciplines which is not restrictive: it is permissive of complexity and as such is only moderately essentialist. Turning to the second characteristic of essentialism, the generative power of phenomena, it follows from Wittgenstein's position that phenomena are not necessarily or uniformly generative because their characteristics are variable.

However, a moderate essentialism goes further than this and says that there is no necessary correspondence between the set of distinguishing properties and the generative properties of a class of objects. Some or all of the distinguishing properties may be trivial, and insignificant compared to 'accidental' properties in terms of effecting change in other phenomena. Moreover the effects of other factors outside those brought about by the phenomenon under consideration will influence its ability to generate effects. Relating these abstract points to the discussion of disciplines, the characteristics of a particular discipline may or may not have significant effects on other phenomena (such as teaching styles) in at a particular time and place.

To sum up: the ontological standpoint based on this set of propositions says that objects such as disciplines can have multiple and variable characteristics, depending on their sets of relations and the level of analysis at which they are viewed. They do however draw (differently) on a set of familial characteristics. They also have varying generative properties of different power which are not necessarily linked to their characteristics, their familial resemblances, and some of which are not unique to them.

Retaining essentialism

Sayer (1997) argues that deploying a form of essentialism in social science research is necessary for two critical reasons, linked to the two characteristics of essentialism itself with which the paper began. First for reasons of conceptual clarity; because it is always necessary in research to categorise and distinguish between phenomena by identifying

what they are and what they are not: to 'sort things out' (Bowker and Star 2000). Second, for reasons of explanatory power, because it is one of the tasks of social science to explain aspects of the world through establishing how the social world works, to show how phenomena are linked and to map the flow of causality. Causality need not, of course, be singular or even regular, it need not be permanent. But without a causal account of some sort there is no explanatory purchase. For Sayer, the development of a moderate essentialism is a pre-requisite for a *critical* social science, because accounts that lack an attempt to identify structured regularities and links between the properties of phenomena and emergent outcomes simply have no conceptual purchase on structured inequalities. Critical realists such as Sayer point out that a strong anti-essentialist position is devoid of emancipatory possibilities because it sees the social world as 'a turbulent system, where "order" and "consensus" emerge locally and for the time being, if at all' (Fuchs 2001, 4). The clear vision required to see the mechanisms of inequity is lost in this view of the world and how it works.

Recognising disciplines

The account of disciplines set out above raises two important questions: first, if dynamism and internal diversity so characterise individual disciplines as they are articulated in different places and at different times, how are they recognisable at all? Generally speaking people are able to distinguish disciplines from hobbies or journalism, and to see that sociology is different from anthropology and social geography. How does this happen? Secondly, how much change can a discipline undergo before we conclude that it is no longer what it was but something different?

This issue of categorisation, of 'sorting things out' (Bowker and Star 2000) is not just an academic one: it has real consequences. For example there have been heated debates about whether schoolchildren doing arithmetic with a calculator are *really* doing mathematics, whether the pole-vaulter using a new high-performance technologically-enhanced pole is *really* doing pole-vaulting (Wertsch, Del Rio and Alvarez 1995), and whether Oscar Pistorius, the 'blade runner' with prosthetic legs, was *really running* the 400 metres when he broke the world record. Such questions are not primarily about fairness but about categories.

This paper draws on Turner's account (2001) of connectionist learning to illuminate how this type of categorisation happens in situations of complexity. A connectionist approach contrasts with an essentialist one. The latter assumes that learning categorical distinctions involves tacitly learning a list of characteristics that a phenomenon must have in order to be itself: its essential characteristics. We tacitly learn the distinguishing features of sociology, anthropology and geography, respectively and apply those criteria to particular instances of disciplines. In short, the process is algorithmic in character.

By contrast a connectionist account argues that the meaning of a concept is inferentially derived through a process of receiving feedback on behaviour based on information received about that concept. Behaviours and responses that 'work' are arrived at gradually, and concepts firm up cognitively as they no longer receive negative feedback when they are applied. This process can be described as one involving incremental teleo-responses. There is no list or rulebook, as in the essentialist view. In Turner's account a Darwinian process is occurring: a learning method which often leads to successful outcomes, although at the cost of unsuccessful events along the way. Bourdieu (1990) talks about 'a sense for the game' and Giddens (1984) about 'practical

consciousness', aspects of which cannot be articulated, that are inchoate, impalpable, tacit. An example is the way we learn to use the words 'infer' and 'surmise', and distinguish between them. We are probably never explicitly taught this, and we certainly don't consciously refer to and apply a rule about which to use. Despite the subtle differences between them we come to know how to apply both.

People develop *functional equivalents* to recognition rules; they do not learn recognition rules themselves. These functional equivalents grow over time and with experience. But because experiences are different for different people and because the feedback they receive is contextual, recognition rules are not exactly the same for everyone (for example even experienced markers will disagree about appropriate grades for an assignment).

Moreover, the functional equivalents of rules are situationally contingent: they depend on the context in which the rule-equivalent is applied, and in particular on the purposes pursued by the object of that rule recognition. Finer levels of discrimination will be applied when discussing the characteristics of a particular discipline with its practitioners than with lay-people, for example. Thus these functional equivalents are purpose-relative. More sophisticated levels of these functional equivalents of rules involve factoring in understandings of the political and pragmatic factors which condition how they are applied. Bourdieu's 'game' which we develop a sense of becomes more subtly understood with experience.

For university teachers a familiar example involves the assessment process. With experience they are able to recognise excellent work and distinguish it from simply good work or a bare pass, even though the content of essays being assessed may be very different. They have not achieved this ability by learning a set of explicit marking criteria in a Boolean, rule-based way, but rather by developing cognitive 'standards frameworks' through experience. Empirical data from research with academics who were asked to think aloud about the processes involved in making assessments as they do it (Bloxham, Boyd, and Orr 2011) have demonstrated this:

> [Markers] did not show evidence of linear or discrete processing of individual criteria; indeed they appeared to be involved in multilayered juggling of overlapping elements in order to reduce them to a single representation in a percentage mark or grade. There was no evidence of them assigning marks to individual elements and then combining them to arrive at a final grade. (Bloxham, Boyd, and Orr 2011, 662)

Apart from this recent evidence of how marking is actually done by experienced academics, Alison Wolf (1995) has shown that attempts to write 'rulebooks' through writing marking criteria to situate the essence of quality in student assignments which can be universally interpreted identically are always doomed to failure. As Smolensky, Legendre and Miyata say:

> … The richness of human behaviour, both in everyday environments and in the control environments of the psychological laboratory, seems to defy rule-based description, displaying strong sensitivity to subtle … factors in experience … (1993, 382)

Applied to the concept of academic disciplines in general and to specific examples of them, connectionist learning is applied in relation to the nature of the family resemblances of discipline, and of particular disciplines about which information and feedback is received. Groupings of elements in different configurations are markers which assist judgements about the legitimacy of claims to disciplinary status. These

may include: patterns of discourse; a set of research concerns; conceptual theoretical tools; a disciplinary saga; a set of knowledge resources; conventions of appropriateness around research and teaching; and dominant assumptions about ontological and epistemological issues. Subtle understandings of discipline also take into account the internal politics and policies of universities which are significant in affecting the ways that disciplines are presented and named in their organisational instantiations.

Moderate essentialism: implications for research practices

The approach set out here to conceptualise discipline and disciplines makes research design a more complex process than a nomothetic, strong essentialist approach does. In the latter case that process simply involves selecting samples from within categories: hard versus soft disciplines, pure versus applied ones, urban versus rural and so on. In this case the assumption is that the categorical distinctions have epistemological and ontological purchase. There are many examples in social science of such essentialist, nomothetic approaches: Hofstede (1980, 1991) on individualism versus collectivism or high versus low-context cultures for example.

Even from a position which acknowledges the critique of strong essentialism it could be argued that this is acceptable, given appropriate health warnings. Weber's (1904/1949) concept of the 'ideal type' situates models in research that exaggerate and diminish aspects of 'reality' as an acceptable basis for research, as long as the model of reality and the reality of the model are not confused, and as long as it remains clear that ideal types have been created for heuristic purposes only. For some sets of research questions in some contexts this may be an appropriate path. In general however this paper has argued that the strong essentialist position is too distorting and does not adequately reflect the complexity of the forces at play.

Before setting out the research implications of a moderately essentialist position it is helpful to develop a revised definition of 'discipline'. The following sums up the position set out above:

> Disciplines are reservoirs of knowledge resources which, in dynamic combination with other structural phenomena, can condition behavioural practices, sets of discourses, ways of thinking, procedures, emotional responses and motivations. Together this constellation of factors results in structured dispositions for disciplinary practitioners who reshape them in different practice clusters into localised repertoires. While alternative recurrent practices may be in competition within a single discipline, there is common background knowledge about key figures, conflicts and achievements. Disciplines take organisational form, have internal hierarchies and bestow power differentially, conferring advantage and disadvantage.

If such an approach is adopted and applied in research into higher education there are key implications for what can be known and what truth claims can be made as well as for developing appropriate research questions and sensible research designs.

What can be known, the epistemological issue, is limited by the fact that a moderate essentialist position argues that generative effects are contextually contingent and provisional upon other factors. Causality is multiple and the interplay of factors influencing behaviour plays out differently in different contexts. So no simple statements can be made about, for example, teaching and learning practices associated with particular disciplines across multiple sites. Other structural factors, such as the prevalence of managerialist discourse and ideology, played out differently in different locales, are

significant in conditioning behaviour, as the definition above suggests. Research can, however, pick out the factors at play in one site and can offer conceptual clarity about the kinds of factors that are significant, what others could be in other circumstances, and why. Generalisation of findings to a much bigger population, at least in any simple sense, is not possible. However, research can offer findings which are illuminative in nature and so allow improved conceptualisation of the factors at work in other contexts.

Therefore any research questions posed need to take into account what this position considers 'answerable'. Questions can, for example, shape research which unpicks the influence of disciplinary characteristics in one or two locations, but with limited truth claims and provisional conclusions. The significance of the research needs to be located elsewhere than in claims to generalisability to other sites of disciplinary articulation. This claim to significance may be grounded in research which leads to conceptual clarification, or to the generation or further development of theory. In more developmental research designs the claim to significance may lie in the implications that are drawn out for practices, policies, structures and processes in the site of the research. For example, understanding the significance of disciplinary differences in one university which is attempting to introduce more flexible, employment-focused curricula may be helpful to those in other contexts seeking to do similar things, but the research questions and concomitant findings need to be carefully delimited in that research.

This argument means too that research designs which flow from the research questions and are shaped to be the most appropriate for answering them also need to be delimited in specific ways. A moderately essentialist position emphasises contextual contingency, and this privileges close up, case study-based research designs. Depth research into numerically limited samples and exploring context and conditioning factors as thoroughly as possible is more likely to lead to improved understanding of what is going on than large-scale surveys based on assumptions of comparability. Adopting an explicit and well-developed conceptual rationale for such depth research may help mitigate the 'tribal' tensions that often arise in the social sciences, including research into higher education, around the issues of quantitative versus qualitative methods and large-scale versus small-scale studies. At the same time, however, it is important not to lose sight of the ways in which larger structural factors impinge on the local. In higher education, as elsewhere, national and global structural factors affect everyday reality, sometimes in very significant ways. The marketisation of higher education, its massification and consumerisation, technological innovation, new managerialism; the rise of the evaluative state and the fiscal crisis of the state have direct effects locally but are large-scale structural phenomena.

Conclusion

The above discussion leads to the conclusion that without the disabling characteristics of strong essentialism, the model of social reality in universities that we have to work with becomes more complex, more nuanced and closer to depicting real processes within universities. However this represents a more difficult challenge for researchers and others than do simple matrices of disciplines based on whether they are pure or applied, soft or hard, urban or rural as is done in some essentialist accounts.

While such simplistic representations have their attractions for the researcher looking for a rationale for the research design, they have very little analytical purchase on the complex world of higher education. This has important consequence for the

framing of useful research questions, for the elaboration of research designs, as well as for the nature of the truth claims researchers into higher education can make. It also changes the map of pathways towards a cumulative development of understanding through research into higher education. For managers in universities it means even more complexity in terms of the way they think about the potentialities and limitations shaped by the disciplinary makeup of their institution: it is difficult to make accurate generalisations about the character of disciplines and what might be appropriate for them. It has implications too for educational developers and others interested in enhancing the learning and teaching that goes on in universities, when the patterns of practices in that regard are so irregular.

Nuancing the understanding of disciplines, and shifting towards a postmodern perspective on them, therefore, adds complexity in a number of fields, but offers a less simplistic, essentialist and reductionist account; one that is more appropriate for higher education in the twenty-first century.

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