

Comprehending the always becoming and never is: The concept 'discipline' *in re*

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Abstract

Meaning requires social participation and structure. Culturally and historically situated both participation and structure mutate. In consequence meanings and the conceptual frameworks in which each is embedded are neither nebulous nor entirely coherent. Although lack of discreteness creates an impression that related meanings and frameworks are independent and interdependent, the “overlapping and blurring need not be evidence that invalidates the classifications” (Peck MacDonald, 1994, p. 12). It is in the sense of disciplines as classifications of meaning that defining them requires scrutiny of the history of the act of classification itself. This explains why disciplines defy normative definition and why they can only adequately be apprehended *in re*, in the process of becoming. Why is it important to do so? Disciplines are the dominant principle around which universities currently are organised. From a contemporary perspective, therefore, they have an apparent permanence borne of familiarity. They are, however, relatively recent innovations: the oldest of Europe’s universities have not had disciplines for as long as they have had them. From this perspective disciplines might come to be considered simply ephemeral reflections of Realism. Ephemeral because classification, a necessary condition for human cognition, only works when the advantages of simplification outweigh the loss from view of complex interrelationships. It is in this context that the exponential elaboration during the twentieth century of the networks linking an increasingly fragmented yet interdependent global society served to destabilise established categories of knowledge (Smith & Jenks, 2006) and, in doing so, exposed the disciplinary exceptionalism of universities to interrogation.

Relevance

Unlike the case in medieval universities where dialectic was both content and method or in eighteenth and nineteenth century modernist universities where scientism was also both content and method, content and method at contemporary universities have become fundamentally detached. There is no discipline specific methodology and no method without adjectives that is specific to any methodology. This means that Learning Advisors need to indicate their awareness of this development through the

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use in all disciplinary contexts of methodologically inclusive vocabulary. They need to be aware, for example, that the concept ‘argument’ is disputed on epistemological grounds by those who, instead, use the concept ‘conversation’. That the term ‘literature review’ is disputed by those who, instead, use the term ‘review of the discourses’ and that the word ‘problem’ connotes a bounded question and an encapsulated answer. As such it does profound injury to the open-endedness of complex research settings. Language, like knowledge, is not simply ‘transparent’, reflecting an objective reality: as an inevitable consequence of its socially constructed, communicative function, it is a constitutive force reflecting particular perspectives, as in the case of disciplines, in a continual process of becoming.

Introduction

Disciplines are the dominant principle around which contemporary universities are organised and the research work undertaken in them legitimised. In this sense they constitute the sociology of academia: cultures and frames of reference defining sets of material practices designed to generate viable ways of knowing. But, reflecting a mere sequence of the more recent of the theoretical stances characterising Western intellectual history, disciplines are novel and evolving conceptualisations. They were not originally conceived as such. In the intellectual environment of the eighteenth and nineteenth centuries they were regarded as accreted slices of knowledge legitimised by the laws of a rational universe. However, in an institutional setting, disciplines become destabilized when confronted with new understandings and different sets of social needs. It is thus no accident that the exponential elaboration during the late twentieth century of the networks linking an increasingly fragmented yet interdependent global society have led the purposes of research to become more diffuse and the number of legitimised ‘ways of knowing’ to increase (Newman, Ridenour, Newman, & DeMarco, 2003). It is, therefore, also no accident that qualitative, mixed methods and interdisciplinary research, individually and collectively, also reflect complexity and ambiguity. It is apparent, therefore, that disciplines are culturally and historically situated (Davies & Devlin, 2007). Although they have an apparent permanence borne of familiarity their evolution has impacted on their identity and cultural characteristics (Becher & Trowler, 2001). This explains why they defy normative definition and *post rem* (having become) taxonomic description. They can only adequately be apprehended, as befits evolving structures, *in re*: in the process of becoming (Frow, 2006).

Scholasticism

It was, Kuhn argued, the dialectic exchange within and between schools of thought such as those of Plato and Aristotle in the 4th century BCE that resulted in a preliminary synthesis of ideas and assumptions about the nature and purpose of different ways of knowing. This was the process that marked the beginning of what would later become a disciplinary culture: by removing the need to constantly renegotiate who does what and why, it allowed a ‘community of practice’ to emerge

thus facilitating an exchange of ideas about specific issues (Schoenberger, 2001). The motivation for both Plato and Aristotle was a question that, as yet, remains unresolved: how does consciousness emerge from matter? Plato's response was to argue that although matter obeys physical laws life, and thus consciousness, is a vital force beyond human comprehension infused into mere material (Lewin, 2001). This made Plato an idealist: Truth, because it is a product of consciousness, must be independent of us. This belief resulted in a set of philosophical distinctions, appearance – reality, mind– body that dominated Western philosophy until the mid-twentieth century. It was these distinctions that allowed Plato to provide the Socratic project of establishing universal claims with philosophic structure.

Thus, by demarcating a boundary between what he considered superior philosophic thinking and the partial view of other types of thought (Rumana, 2000), Plato took the first steps toward identifying a specific subject field. Plato's influence was also fundamental in the early medieval church where his concept of pure and complete universals explained both the nature of the divine and the relation between body and soul: the former as shadow and the latter as eternal. It was to be expected, therefore, that Platonism underlay the medieval system of education in both schools and universities. Prefiguring the contemporary nature-nurture debate Plato believed life has a pre-bodily existence where knowledge of the Forms, distinct but mind independent, immaterial, eternal entities, (numbers, for example) provide the basis of innate knowledge. It is in this context that Forms, because of their role as referents or universal concepts, allow us by intellectual inference alone to make the phenomenal world intelligible. The process is what Plato called turning the soul around, so rather than being concerned with the body the 'eye of the soul', instead, will gaze upon the *eidos*, the immaterial Forms, the invisible world of universal truths (Fiumara, 1995). This visual metaphor has played a determinative role in Western intellectual history. In contemporary terms we refer to 'insight' and we use the word theory which derives from the Greek verb *teorein*, to see (Fiumara, 1995). Plato knew that the world of the senses is stable enough for us to describe, but he also knew that we mistake what changes slowly for permanence: "as far as any rose could remember, no gardener had ever died" (Blackburn, 2005, p. 101). In contrast to the eternal world of the Forms sensory descriptions, therefore, could only achieve the status of *doxa*, or opinions. This remains a contemporary issue: "universal change is hostile to stable understanding. Science must proceed by finding the permanent among the impermanent" (Blackburn, 2005, p. 99). Plato did not, therefore, doubt the existence of a reality, but for him it was extrasensory.

Learning, therefore, was a process of being brought to an awareness, of being reminded, of the Forms. This was the purpose of philosophic insight and could only be achieved if students were exposed to a hierarchically-sequenced series of studies progressing from sense perception through to intellectual intuition. For this reason, in medieval schools the trivium, a course in the study of the elements and use of language, was preparatory to the study in the *quadrivium* of mathematics: arithmetic (pure number), geometry (stationary number), astronomy (moving number) and

harmonics (applied number). On this basis grammar, logic and rhetoric developed an understanding of what is said and written and mathematics, because the apparent certainty of its pure logic leads the mind upwards from the mutable to the immutable, permitted an understanding of the Divine (*Catholic Encyclopaedia*, 1907). Thus, as in the schools of classical antiquity, there was no need to develop a clearly defined concept 'subject', the trivium and quadrivium were simply a means to an end. Because Plato considered the spoken word greatly superior to the written (Peters, 2009), dialectic was the principal teaching method in both medieval schools and universities. Thus, because learning was a process of noetic cognition there was no need for content or theme: dialectic was both method and content. The teacher's task, therefore, was to prompt reminiscence of the innate Forms: to allow truth, in other words, to be reborn. So, in addition to being noetic, dialectic, in the sense in which it elicits intuitive wisdom through critical questioning, was considered 'maieutic' (from maievtikos, meaning midwifery) (Rowland, 2006). For this reason the most important academic exercise at medieval universities was not a written examination but the disputation, and degrees were conferred on the basis of a student's ability to defend a series of arguments or theses in open, rigorous debate.

Although the modern concept of a discipline was only to emerge later it had its origin in medieval universities. The etymology of the word lies in Latin where broadly interpreted it embraced education, training, self-control and determination. But it also had a particular meaning: because she embodied *frugalitas*, *severitas* and *fidelis*, *Disciplina* was one of the favourite goddesses of the early Roman legions. It was appropriate, therefore, for the term to be applied in medieval universities in the context of the qualities of self-control and orderliness required of a scholar. It was also in this context that a student was a *discipulus* of a teacher while the set of principles around which the latter based his teaching was a 'doctrina' (Craig, 2003) (Canon Law only applied to males so early universities were entirely male institutions). In its early use in an academic context, therefore, discipline implied only practice and behaviour rather than, as it means today, practice and behaviour together with a set of abstract principles (Craig, 2003).

The term 'faculty' was originally a loose term for 'ability in knowledge'. On this basis it was first used in the early medieval period to apply to those teachers in church schools who had coalesced into informal groups on the grounds of what they taught. But, together with the charters establishing universities, particularly those issued in the twelfth and thirteenth centuries, went statutes permitting each faculty to regulate its own affairs. For the first time, therefore, clear lines of administrative demarcation were drawn between what had previously been informal groups of teachers (*Catholic Encyclopaedia*, 1907). To this extent early faculties were roughly analogous to contemporary academic departments. It is not coincidental that this compartmentalising development coincided with the twelfth century rediscovery by the West as a consequence of the Crusades of the works of Aristotle. The emphasis in his writings upon the need to study and categorise particular things in order to explain the universal was, during the course of the thirteenth century, for the first time

successfully synthesised into Christian theology by St Thomas Aquinas. As opposed to the fundamentalist concern with Revealed Theology and its emphasis on faith alone, his concern was with Rational Theology in order to make Christianity a greater force for social justice: God's plan for humanity, he believed, was accessible to Reason (Rumana, 2000). This fusion of Platonic, Aristotelian and eschatological Catholic thinking into Scholasticism enabled new ways of thinking about the world.

Modernism

The logical consequence during the sixteenth and seventeenth centuries when these new ways of thinking were applied outside the authoritarian framework of the church was Humanism: a belief that Christian faith required a commitment to the search for truth and morality not through tradition or authority but through the application of reason alone. In this sense reason was liberating for its application could free humanity from its passions and its history. The logical consequence was individualism: "man [sic] in the image of God" (Smith & Jenks, 2006, p. 59). There was also a less logical consequence: Realism. Reflecting their historical legacy of opposition to an absolutist theology, Realists sought with Foundationalism, the idea that knowledge must be founded on concrete certainty, to establish a new science which would permit the same level of confidence which medieval theologians had expressed in their belief in a reality ontologically independent of the senses. The application of reason, an essence fundamentally detached from its surroundings (Linn, 1996), to establish objective facts upon which incontrovertible knowledge could be built proved extraordinarily seductive for most of the next three centuries.

Perhaps the primary reason for the allure of the power of reason is the attraction of the concept of an ordered universe. One without the other would, in fact, make little sense (Linn, 1996). Mathematics is a language apparently capable of precise definition in a way not possible by 'natural' language and it was in this sense that Galileo, as in the case of Plato, spoke of mathematics as the language of the universe: phenomena can be decomposed analytically and treated mathematically as though they were not complex systems but the sum of their parts (Smith & Jenks, 2006). It was Newton, though, who through the powers of mathematical calculation and empirical observation, appeared in his 1687 work *The Mathematical Principles of Natural Philosophy* to have deciphered God's ultimate laws explaining how the universe functioned (Lakatos, 1978). Together with John Locke's argument that the human mind is not contaminated by original sin but is a *tabula rasa* upon which external reality is the most formative influence, Newton's work vindicated the belief that there is one science about one determinate world and that an individual is capable of objectively seeing that one world as it 'really' is. The heritage, therefore, of the cultural values of sixteenth and seventeenth century Europe was a gradual but fundamental reformulation of the nature and purpose of knowledge. No longer was it idealist but realist: "each science studies a realm of distinct facts about one part of reality and aims to describe the quantities, qualities, properties and relationships of and between phenomena" (Hart, 2005, p. 198).

However even with this imperative in place the generation in the West of the abstractions upon which the new categories of knowledge could be based was slow. The reason lay in the limited array of conceptual tools available to individuals at that time. Concepts such as ‘element’, ‘compound’, ‘culture’, ‘society’ or ‘economics’, for example, are not obvious (Schoenberger, 2001). What can be stated depends, therefore, on the classificatory resources already present in language (Fiumara, 1995). For this reason much thought, time and work was needed to establish that there were such things as ‘elements’ situated within ‘compounds’ or ‘cultures’ positioned within but separable from ‘society’ (Schoenberger, 2001). It was, thus, only gradually that the Platonic system of training the mind gave way to imparting knowledge. In the emerging system subjects at universities were treated simultaneously, even eclectically, with little or no reference, as had previously been the case, to the careful gradation of knowledge as a systemic whole, lectures replaced the dialectic exposition of texts and the vernacular came to be used in place of Latin (*Catholic Encyclopaedia*, 1907). Under the influence of foundationalism these lectures, though, were of a special kind. Hilaire Belloc in ‘Lines to a Don’ expressed the essence of the difference:

... those regal dons
With hearts of gold and lungs of bronze
Who shout and bang and roar and bawl
The absolute across the hall. (Blackburn, 2005, p. xvii)

The discovery and elaboration of new concepts and empirically established scientific laws during the course of the nineteenth century served to make the power of Realist science unassailable for, with its unparalleled achievements, only it could claim to have successfully characterised reality (Sharrock & Read, 2002). Positivism, a philosophy most clearly enunciated by Auguste Comte in the 1850s, appeared to crown this achievement for it extended the methods and attitudes of Realist science to all fields of human knowledge: rationality and objectivity in both the sciences and the humanities are both desirable and achievable, cumulative facts are therefore what count as knowledge and the history of civilisation is a history of progress. Modernism had been born.

Postmodernism

Ironically, though, the ideas of a number of the most influential thinkers of the nineteenth century were to disrupt this perception of Modernism. This should not have come as a surprise for from Romanticism’s emphasis at the beginning of the century on subjective experience, to Nietzsche’s ‘will to power’, to Darwin’s blurring of the distinction between animal and human, to Marx’s revolutionary socialism which replaced human rationality as the driving force of history with the rationality of economics, it is apparent that an assault upon Realism had been running as an

undercurrent to its most dramatic scientific and engineering achievements. The dawn of the twentieth century provided additional impetus to these trends. On the one hand Freud, Adler and Jung showed that objectivity was not a personal attribute to be set aside on demand: perception, instead, was unavoidably filtered by experience. Drawing a distinction between facts and values was, therefore, as Nietzsche had argued a fallacious dichotomy. On the other hand, Einstein's $E=MC^2$ undermined Newtonian certainties: time was now relative and reality a function of the interaction of energy, mass and light. These new insights and exposure to the cataclysmic consequences of primal nationalism in two world wars undermined what little faith remained in humans as rational beings. It also made Modernism's claim to have lifted knowledge above the flow of history unsustainable. Clearly Modernism produced remarkable results, the problem was overconfidence in what could be represented and analysed (Richardson, 2005). Gone, therefore, were its theoretic foundations: an objective external world, a progress driven cybernetic and, perhaps most important of all, humanism. The replacement in importance of agency by structure led to the disappearance of humanism's central concept of the unitary-autonomous person (Craig, 2003). Such has been the change that a contemporary hypothesis proposes that humanity both uses and is used by cognition. Far from cognition making us the independent agents of modernism cognition as a self-organising agent might, therefore, merely be parasitical on us (Smith & Jenks, 2006).

Classification is a necessary condition for human cognition but classification only works when it is not seen as definitive and when the advantages of simplification outweigh the loss from view of complex interrelationships. It was in this context that the exponential elaboration during the twentieth century of the networks linking an increasingly fragmented yet interdependent global society served to destabilise established categories of knowledge (Smith & Jenks, 2006). This was also the context in which philosophic thinking during the second half of the twentieth century came to be dominated by the twin pillars of Post-positivism: Critical Realism and Constructivism. Despite their differences in other respects each of these perspectives were drawn together with the acknowledgment by the former and the embrace by the latter of the idea that observation is both interest and power laden (Mertens, 2003). Both the process of deduction and the concept of rules and facts became, therefore, either suspect or were rejected entirely and faith in the metanarrative of disciplinary study shaken (Rowland, 2006). It was in this environment of delegitimation where existing classifications of knowledge became open to interrogation that earlier claims by academics to exceptionalism because of the special significance of disciplinary knowledge no longer found a sympathetic audience (Becher & Trowler, 2001).

Conclusion

The establishment of a discipline is both a social and intellectual project. The late nineteenth century emergence of sociology, for example, was a consequence of the need to integrate an array of issues ranging from medicine to statistics in order to resolve practical problems arising from culturally derived ethical concerns important

to society as a whole (Craig, 2003). This is an ongoing process. In contemporary terms technical excellence is no longer an end in itself; it has to be kept in balance with humane consequences. Environmental impact and ecological consequences, for example, are now important aspects of engineering (Lifson, 1997). Attitudes to ethics in medicine have also, for example, changed from what used to be the case:

To the extent that ethical questions arose in the practice of medicine, the doctors, as professionals, were expected to take care of them, and, indeed, took good care that it was they who took care of them. (Lifson, 1997, p. 1)

The relationship between disciplines and society, thus, is reciprocal: for the past three centuries, for example, science and engineering have not only been sustained by Western cultural notions they have also been powerful influences sustaining those notions (Craig, 2003). Disciplines, thus, constitute culturally embedded discourse practices that emerge, evolve and transform as a result of an exchange of ideas and practices within and between them and between them and society (Greene & Caracelli, 2003). They are, therefore, evolving postulates rather than factual descriptions (Smith & Jenks, 2006). It is in this context that the term ‘emergentist pluralism’, an ontology of continual becoming, is justified (Osberg, Biesta, & Cilliers, 2008).

References

- Becher, T., & Trowler, P. R. (2001). *Academic tribes and territories: Intellectual enquiry and the culture of disciplines*. Buckingham, England: The Society for Research into Higher Education and Open University Press.
- Blackburn, S. (2005). *Truth: A guide*. Oxford: Oxford University Press.
- Catholic Encyclopaedia (Volume 1)*. (1907). New York: Robert Appleton Company. Retrieved from <http://www.newadvent.org/cathen/01760a.htm>
- Craig, R.T. (2003). *Discursive origins of a communication discipline*. Paper presented at the National Communication Association, November 21, Miami Beach, Florida.
- Davies, M., & Devlin, M. (2007). *Interdisciplinary higher education and the Melbourne model*. Paper presented at the Philosophy of Education Society of Australia Conference, December 6-9. Wellington, New Zealand.
- Frow, J. (2006). *Genre*. Abingdon, England: Routledge.
- Greene, J.C., & Caracelli, V.J. (2003). Making paradigmatic sense of mixed methods practice. In A. Tashakkori & C. Teddle (Eds.), *Handbook of mixed methods in*

- social and behavioural research* (pp. 91-110). Thousand Oaks, CA: Sage Publications.
- Fiumara, G.C. (1995). *The metaphoric process: connections between language and life*. London: Routledge.
- Hart, C. (2005). *Doing your masters dissertation: Realizing your potential as a social scientist*. London: Sage Publications.
- Lakatos, I. (1978). *Philosophical papers. Volume 1: The methodology of scientific research programmes*. In J. Worrall & G. Currie, G. (Eds.), Cambridge: Cambridge University Press.
- Lewin, R. (2001). *Complexity: Life at the edge of chaos*. London: Phoenix.
- Lifson, A. (1997). A conversation with Stephen Toulmin. *Humanities*, 18(2). Retrieved September 24, 2008, from <http://www.neh.gov/news/humanities/1997-03/toulmin.html>
- Linn, R. (1996). *A teacher's introduction to postmodernism*. Urbana, IL: National Council of Teachers of English.
- Mertens, D.M. (2003). Mixed methods and the politics of human research: The transformative-emancipatory perspective. In A. Tashakkori & C. Teddle (Eds.), *Handbook of mixed methods in social and behavioural research* (pp. 135-166). Thousand Oaks, CA: Sage Publications.
- Newman, I., Ridenour, C.S., Newman, C., & DeMarco, G.M.P. (2003). A typology of research purposes and its relationship to mixed methods. In A. Tashakkori & C. Teddle (Eds.), *Handbook of mixed methods in social and behavioural research* (pp. 167-188). Thousand Oaks, CA: Sage Publications.
- Osberg, D., Biesta, G., & Cilliers, P. (2008). From representation to emergence: Complexity's challenge to the epistemology of schooling. *Educational philosophy and theory*, 40 (1), 213 - 227.
- Peck MacDonald, S. (1994). *Professional academic writing in the humanities and social sciences*. Carbondale, IL: Southern Illinois University Press.
- Peters, M.A. (2009). Editorial: Heidegger, phenomenology, education. *Educational philosophy and theory*, 41(1), 1- 6.
- Richardson, K. A. (Ed). (2005). *Managing the complex: Volume one. Managing organizational complexity: Philosophy, theory, and application*. Bridgeport,

CT: Information Age Publishing.

Rowland, S. (2006). *The enquiring university, compliance and contestation in higher education*. Maidenhead, England: Society for Research into Higher Education and Open University Press.

Rumana, R. (2000). *On Rorty*. Belmont, CA: Wadsworth.

Schoenberger, E. (2001). Interdisciplinarity and social power. *Progress in Human Geography*, 25(3), 365 - 382.

Sharrock, W. & Read, R. (2002). *Kuhn: Philosopher of the scientific revolution*. Cambridge: Polity Press.

Smith, J., & Jenks, C. (2006). *Qualitative complexity*. Abingdon, England: Routledge.