Planning and interdisciplinarity

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Introduction

A fundamental question for planning education and practice is: what is planners' unique competence that no other professions can legitimately claim as theirs? What distinguishes planners from geographers, architects, environmental scientists or professional mediators? There is no easy answer to this question, partly because "planning has not developed as an intellectual discipline in its own right" (Grant, 1999, p. 4). Instead it has drawn on other foundation disciplines. Given that the relative importance of these in planning education is fluctuating all the time, "the intellectual basis of planning is exceptionally flexible and fluid" (op cit p. 5). While some consider this 'interdisciplinary' basis as a weakness - making it difficult for planners to know exactly what belongs to planning- others see it as a key strength. Indeed, interdisciplinarity is now regarded as a virtue despite the fact- or may be because- it is rare, operationally demanding and intellectually challenging. A discussion on interdisciplinarity needs to start with an understanding of what constitutes disciplinary knowledge.

What is a discipline?

The rise of mono-disciplines, since the 18th century, has been due partly to the orientation of western cultures towards analysis rather than synthesis. Therefore, "modern scholarship lays inordinate emphasis on specialisation – which in modern university attests, implies and entails the segregation of knowledge into distinct 'disciplines'…" (Baigent et al, 1982). Disciplines are therefore social constructs that have evolved through historical processes. They involve both objects and methods of study. When we speak of an academic discipline we imply not just a particular subject matter, but also a system with a number of social and functional dimensions (Harriss, 2002). *Functionally*, disciplines provide a set of rules for: what constitute a 'problem', what counts as evidence, or what is considered as acceptable methods by which knowledge is produced, evaluated and transferred? *Socially,* disciplines provide shared languages, concepts and tools; they create identities, peers, careers, and even 'professional refuge' for activities that otherwise might not be valued (Petts et al, 2008). Through such social and functional dimensions, disciplines perform important roles in verifying knowledge claims. They become deeply structured to the extent that there is a danger of 'disciplinary tribalism'. Hence, disciplinary structuring is so deep that it is difficult to overcome just by good intentions. Nevertheless, there is a value to be gained from moving beyond disciplinary boundaries; not least because complex societal challenges do not respect disciplinary boundaries.

Multi-disciplinary, interdisciplinary and transdisciplinary?

In the literature as well as our daily conversations we tend to come across a confusing set of terms, such as multi-disciplinary, interdisciplinary and transdisciplinary. They are often used interchangeably despite conveying different meanings (See Sillitoe, 2004). *Multi-disciplinary* approach involves a number of disciplines coming together but each working independently and primarily with their own frame of reference and methods. Hunt and Shackley (1999) call this the 'science of interaction' whereby disciplines can co-exist in a particular context but retains their boundaries.   When it works well, it is productive and allows problems to be looked at from different perspectives. So, as Petts el al (2008:596) suggest "it should not be seen as failed interdisciplinarity. *Interdisciplinarity* involves occupying the spaces between disciples to build new knowledge (Sands, 1993). It is a synthesis of knowledge whereby our understanding is modified in the interplay with other perspective. Hunt and Shackley (1999) call this the 'science of integration' whereby coherence between the knowledges that are produced by different disciplines is sought (Lau and Pasquni, 2008). *Transdisciplinarity (or pluridisciplinarity)* creates a cross-road in which different disciplines intersect, problematise and challenge each other (Sands, 1993). It transcends, re-negotiates and re-draws traditional disciplinary boundaries (Petts et al, 2008). Hunt and Shackley (1999) call it the 'science of hybridisation'. Trans-disciplinary approaches involve organisation of knowledge around complex subjects, or real world problems, rather than disciplines. Such approaches are more likely to produce outcomes which are more than the sum of different parts. One of its positive by-products is a greater awareness and reflection on one's own particular disciplinary knowledge.

A continuum!

In practice, however, there exists a continuum of approaches rather than neatly separated categories that I outlined above. For example, at their weakest, these approaches may be no more than cooperation, while at their strongest they can be transformative and capable of recasting disciplines. In general, interdisciplinarity occupies the broadest position on the continuum which also explains its wider usage than the other two. However, even here, it is possible to distinguish between two different types: 'cognate interdisciplinarity' and 'radical interdisciplinarity'. The former happens *within* natural or physical, or social sciences while the latter takes lace *between* them (Evans & Marvin, 2006) spanning the natural and the social. It is important to note that such categorisation doesn't necessarily suggest superiority of one type over the others; it basically highlights the fundamental differences between the often interchangeably-used terminologies.

Epistemological challenges and institutional barriers to interdisciplinarity

As mentioned earlier, working across disciplines is hard. Firstly, there are a number of epistemological challenges, notably the persisting disciplinary silos with regard to: the understanding of what constitutes knowledge and what is seen as legitimate methods for producing new knowledge; the intellectual traditions; and, problem definitions. As Baigent et al (1982) argue, disciplinary "'experts' tend generally to regard fields other than their own with considerable suspicion – spurious at worst, at best irrelevant. And, 'interdisciplinary' research is often actively discouraged as being, among other things, too speculative". Secondly, there are several institutional barriers to interdisciplinary working, such as: research and educational funding mechanisms, institutional practices, research assessment exercises, journals' publication strategies, refereeing processes, and so on.

Despite these barriers, interdisciplinary perspectives provide a useful means of dealing with complex or 'wicked problems' which can not be addressed satisfactorily by a single discipline. In the real world, some of the interesting and complex questions are left at the interfaces between disciplines. Addressing these requires synthetic and integrative approaches. It is this need for integration which puts spatial planning in a position of strength.

To make interdisciplinarity work, certain conditions have to be met. These include for example: mutual trust and respect among participants; confidence in one's own discipline but without being defensive; space and time for sharing of knowledge, different framing of problems and construction of methods; acknowledging that the aim is problem setting and problem solving rather than doing interdisciplinary work for its own sake; and, availability of intermediaries which are not necessarily people but can also be processes.

The challenge for planning

Addressing the problems and opportunities of our contemporary interconnected world needs new forms and patterns of intellectual inquiry that challenge existing disciplinary and institutional boundaries. Spatial planning with its roots in multiple disciplines and its focus on integration has the potential to play a major role here. However, so far the emphasis in planning as elsewhere has been primarily on the *instrumental rationale* for interdisciplinary working. To move forward, there should be more emphasis on its *intellectual challenges*. The questions are:

- Does planning education involve picking and mixing from multiple disciplines, or does it involve redrawing the disciplinary maps in an attempt to understand and explain complex phenomena?

- Does it involve a 'science of hybridisation' or 'integration' of different forms of knowledge or is it just about 'interaction' between them?

The aim of this brief contribution has been to reflect on the notion of interdisciplinarity and planning, but there is another significant aspect of planning which has not been touched upon due to limited space here. That is the interrelationship between disciplinary and experiential knowledge (Davoudi, 2006). Indeed, it is in the infusion of these disciplinary and experiential knowledges that planning has carved out a distinctive place for itself in the family of social sciences. Indeed, the answer to the questions posed at the outset of this paper lies here. What distinguishes planners from geographers, for example, is that planners are engaged in 'doing'. It is about not only understanding space and place, but also aspiring to change them. It is about not only 'critical thinking about space and place' but also using this knowledge as the basis of 'action and interaction' (RTPI, 2003:1).

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