

## Interdisciplinary Knowledge and Practical Wisdom

## PETER CARL

Professor Peter Carl directs the PhD programme at the School of Architecture in the Sir John Cass Faculty of Art, Architecture and Design, London Metropolitan University. His research focuses on understanding architectural and urban order – how they contribute to, and are part of, cultural conditions and possibilities.

The great diversity of approaches in the second half of the 1960's in architecture corresponded to the rise of architecture schools in universities. A spirit of exploration – or guilt with respect to the authority of established disciplines – meant that architects could be found in departments of anthropology, archaeology, art history, computing, engineering, languages, linguistics, literature and film programmes, politics, philosophy, psychology, religious studies, and sociology. No-one from any of these departments came to architecture, however; and architects rarely made serious contributions to the established disciplines. Architecture acquired a reputation for dilettantism rather than for interdisciplinary synthesis ('interdisciplinary' was already a buzzword at the time).

Moreover, the status of architecture departments within the administrative/intellectual structure of universities was ambiguous – sometimes placed with engineering and the sciences, sometimes placed with humanities and arts programmes, sometimes by themselves and, in the UK, sometimes in polytechnics, sometimes in universities. Even now, the contributions of architecture departments to the UK research assessment exercises are split between the peer-review protocols customary in the established

disciplines and project-led research.

Is architecture a composite of disciplines from which an individual can select ad libidum? Do the primary skills of design – ranging from drawing to constituency-building – possess objective value, or are these merely skills to be exercised in the contingent domain of practice? Could any of the teachers fulfil the student requirements in design (generally 60% of a final grade) and in academic subjects (generally divided between physical sciences and cultural studies); or is it right that these are each taught by specialists/experts? Does the spectrum usually observed in the so-called technical subjects between scientific necessity/efficiency and judgement provide a sufficient avenue of communication with the cultural studies; and are the cultural studies (still labouring under the rubric of 'history and theory', from the Beaux-Arts styles and composition) more like a cascade of precedents and possible interpretations than a discipline devoted to understanding the roles buildings, landscapes and cities play in culture(s)? Why has it been agreed internationally that design should be something one does well or badly (even if theory since Vitruvius would have it as right and wrong) rather than an academic discipline in its own right? Similarly, if assessment of design should be 'gualitative', with marks given for 'originality' as well as for resolution of the inevitable conflicts, is the 'good' of good design left to the examiners' equivalent of the peer-review protocol (the architect will face such panels throughout professional life), or might an understanding of the nature of the good arise from architectural design? Does architecture have something to contribute to the other disciplines or is it best considered a practice with multiple fragmentary areas of disciplinary research?

It may very well be that this sort of academic compromise (or muddle) is the most fruitful/creative, the most adaptable, or even just the best available way for a university department of architecture to thrive in a milieu of specialist knowledge. Both practice and research involve collaboration across disciplines more or less improvised according to the issues. However, the phenomenon certainly testifies to a discontinuity between the style of knowledge of the established disciplines and architecture... though it is generally less of a creative dialogue than a condition of mutual toleration – in which architecture passes itself off as another department.

The phenomenon has an historical background, most obviously devolving from the medieval university. Whilst the university, along with religious houses and independent scholars, taught and wrote ("research") in the liberal arts – the *quadrivium* and the *trivium* – the mechanical arts, of which architecture was one, were taught and practiced within guilds. For our purposes, the important aspect of the guilds was their embeddedness in the civic life of the towns. Though full of strife – sometimes bloody – towns retained a continuity of meaning from what we now call economic concerns to what we now call symbolic concerns. In the sixteenth century, the term *renovatio urbis* comprised not only renewal of, for example, drainage canals or defence-works, but also the commissioning of new charitable organisations, poems, plays, festivals, and so forth. Indeed, performance in these areas was a way for the otherwise disenfranchised, but newly wealthy, merchant and banking classes to transform the conditions of civic participation, characteristically understood as an urban embellishment, in which the donor/patron was more or less prominent.

The style of university that we now have is modelled on that of von Humboldt, indebted to Enlightenment protocols of knowledge and its division into sciences and humanities... from which, again, a subject like architecture was excluded (the guild had metamorphosed into the semi-professional and then professional atelier). The transformation of the *quadrivium* into the sciences and mathematics and of the *trivium* into the humanities was the product of a transformation of knowledge itself into statements controlled epistemologically through a methodology derived from Descartes' treatise on the subject. This was a kind of knowledge that was not only secular, but situated in its practitioners, who could be anywhere, but were usually found following the university career path also present in von Humboldt's university, from PhD to Professor. Although recent social and anthropological studies of research in the sciences and technology have significantly modified the standard view of scientific

theory/hypothesis and technological application, it is to the industrial revolution that we owe the conception of a university's usefulness as divided between teaching, research and 'enterprise' (such as the capacity to create 'silicon' valleys). Along with this came the expectation that results could be delivered after the fashion of technology, even in areas like social justice. The experience of history shifted from reinterpretation of traditions to change and innovation like that of technology.

When architecture was formally introduced into universities of this kind, it generally took the form of transplanting the Bauhaus studio-programme, with embellishment tending more towards the sciences or more toward the humanities depending on the institution. The Bauhaus programme sought to achieve a species of cultural salvation by reconciling the persistent tension between craft and industry in a regime of space and form. The artist was generally seen to be master of this domain, and the proposal that it could be deployed from the scale of a spoon to that of a city was seen to be a virtue rather than a concern. Research in this regime principally consisted of designing objects and exhibiting or publishing them, though also available were strange texts like Kandinsky's *Point and Line to Plane*, which advanced a psycho-physics of lyric painting.

Theory/application and the attunement to form and space share an assumption of mastery over the achievement of the happy ending (improvement, progress, betterment) through an emphasis upon generalities. For a sociologist or economist, the life of a city is a matter of statistically-described trends or tendencies, not an ethos. Similarly, the play of forms in space leaves everything to be supplied that makes a building architecture – activities, location, scale, materials, orientation, and so on. Whether or not the now largely routine co-ordination of these procedures is deemed a success (or whether the grim peripheries of cities are the price of the few genuinely remarkable buildings), it is instructive to concentrate upon the particular rather than the general. Instead of promoting design as one or another version of concept>form>BIM>print/build, we might take seriously the involvements of praxis. Here we find a 'vertical' form of interdisciplinary understanding as against the 'horizontal' co-ordination of epistemologically-controlled methodologies. The business of actually concluding a project requires retaining orientation in the face of demands from office politics, public consultation, the availability of skills or materials, lapses in funding, lawsuits, requests for exhibition or publishing and so forth. 'Retaining orientation' means knowing what is essential, how to adapt to new knowledge or vicissitudes. In this context 'vertical' means four things:

Firstly, it is evident that the primordial conditions of spatiality and materiality control or orient the more sophisticated/refined/specialist discourses from engineering, economics, etc. Until it is decided that a project is an auditorium or an airport, with its attendant decorum, no amount of expertise can contribute.

Secondly, and following from this, architecture's involvement with the embodying conditions has a direct bearing upon its nature as a discipline. The embodying conditions underlie all situations, symbols and concepts. Architecture provides the horizon for praxis, articulating the conditions for freedom/culture. Just as one cannot step outside (objectify) Being, so one cannot step outside the interiority of architecture, urban topography or natural settings – one is always somewhere, at some time, involved with something or someone. The common-to-all of architectural settings is neither statistically nor geometrically common, it is ontologically or ethically common.

Thirdly, this allows us to distinguish two forms of objectivity – that deriving from epistemological methodologies and that derived from the cultural orientation, its institutions, its decorum, customs, locale, languages, foods, history and so forth. Epistemological objectivity depends upon ontological/ethical objectivity (in architecture, judgements of 'efficiency' ultimately answer to decorum).

Finally, we must distinguish between ethics (philosophy of the good) and morals (the concrete judgements of particular people in particular historical circumstances). There is only an indirect or dialectical relation between them; the concrete case always involves an element of interpretation, a making-do under the circumstances (a fair summary of architectural design). However, this recovers the 'good' in 'good design' and

suggests that we are no longer involved only with the particular and the general, but, more profoundly, with the particular and the universal (that which is common-to-all).

The generalities are not meaningless. At best, they are of heuristic value; at worst, they contribute to the conceptual flattening of existence and of distinctions in urban and architectural topography that are crucial to civic life. Some architects claim to have moved beyond space to conceiving urban order as information, or as information infrastructure. The illusion of power over complex and rich phenomena leads to the production of illusions, replete with such ambiguities as the similarity or difference between brand loyalty and a political or moral stance. Indeed the conceptual flattening is mostly for the sake of this power, as 'planning', where moral or political ends can be addressed by technological means. We are inevitably in dialogue with the fragments of this motive whenever we become involved with the capitalist city.

By shifting the emphasis of interpretation from the general to the particular, from fields of enigmatic objects to design praxis (meant in its Aristotelian sense of civic commitment), the structure of claims upon freedom becomes thematic. This structure is in fact the topic of architecture. Accordingly, practical philosophy becomes the discipline by which design understands how to reconcile specialist knowledge with civic ethos. Again in Aristotelian terms, this is more like wisdom than knowledge. The contemporary university, despite the hint of 'universal', is not a city; it is an arrangement that promotes the cultivation of autonomous spheres of knowledge. But for precisely this reason, architecture's contribution is potentially highly significant.

