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Editorial

Successful Professional Action and the Rules of Learning

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Imagine three final year undergraduate students, one from architecture, one from construction and real estate and another from urban planning, each set an assignment to read Joseph Schumpeter's 1934 classic work, The Business Cycle. The objective is to provide a better understanding of the dynamics of property markets. Think of this as an input (I) to the educational experience and output (O), the use made of any knowledge gained. Consider two questions: (a) what rules do the students adopt in acquiring understanding as they read? (b) what rules do they adopt in turning knowledge into action (at some later stage)? Cultures of learning in their higher education institution, in particular modules and within their subject will help determine (a). The culture of their profession and the employing agency will help determine (b). Rules governing learning are those that select the questions a student asks when reading (for example, what does this tell me about x?). The x is likely to be quite different for the three students, even though the reading is the same. Rules governing the application of knowledge are those that select the knowledge called upon to inform an action.

The purpose of stating the problem in this way is to focus attention on professional cultures as nexuses of rules that convert learning experiences into knowledge and knowledge into action. The reason for wanting to do this is to consider the idea of professional cultures competing with each other over time. They compete consciously and unconsciously with the result that professions gain and lose dominance in particular roles and functions. I want to direct attention to the unconscious competition. The thoughts developed here follow on from a previous editorial - *Practice-bounded Knowledge* (Webster, 2006).

The significance of this is the current boundary shifts between professional groups – generally in society and particularly in the Built Environment. Take two as illustrations. First, it seems that the respective knowledge cultures within landscape architecture and planning education and practice communities may be giving members of the former, ability to outbid members of the latter in the production of master plans. Second, construction managers seem to have acquired the knowledge to typically outbid architects to lead complex construction projects.

The acquisition of these relative advantages is not only (or some would say not much) about formal education but about the tacit skills and rules of play learned on the job after graduation. The Royal Institute of Chartered Surveyors (RICS) recently visited a UK planning school with a view to selecting masters programmes to accredit. The choice was made less on curriculum content and more on the type of jobs that graduates of the various programmes went into. RICS seemed principally to be concerned about setting up a new channel through which graduates could flow into the firms and jobs that could be relied upon to produce RICS-type professionals. This was mute recognition of the primacy of professional culture in reproducing the skill and value sets that define the profession.

Each subject has, over the course of decades, developed its own distinct professional and academic culture of knowledge. This includes a stock of knowledge and rules governing its acquisition, evaluation and use. Practitioners in these professional fields would not necessarily be conscious of the epistemology that helps define their subject nor be able to distinguish it from others, but all that they do by way of informal or formal learning helps create that epistemology. To help reflect on these cultures of learning, I have chosen an extended quote from Austrian economist and social theorist Freidrich von Hayek (Hayek 1982, pp 17-18) which poses the idea that social rules evolve spontaneously by competition.

> The cultural heritage into which man is born consists of a complex of practices or rules of conduct which have prevailed because they made a group of men successful but which were not adopted because it was known that they would bring about desired effects. (p17)

Hayek is constructing an argument that the rules by which we cooperate with others are discovered over time and that successful rules tend to survive. This can happen without us being aware of the particular ways in which particular practices give advantage over others in achieving desirable outcomes. The competitive selection effect is cumulative. Consider the way a graduate architect is inducted into the profession's rules of knowledge and skill acquisition and evaluation, starting with the design studio during formal education and graduating to the informal processes by which professional competencies and experience are taught and learned. There are undoubtedly rules that will have been consciously adopted in an attempt to bring about some desired effect or other (a design assessment checklist introduced to make a more explicit link between learning objective and grade, for example) but many others have been adopted less consciously. In aggregate, they contribute to the success with which members of the profession cooperate (transact) with others to produce the built environment. The practices of successful schools and successful firms will be emulated, not necessarily on the basis of well founded understanding about how practices convert to outcomes. Over time, practices that enhance the value added by members of a profession will accrue to the professional culture and practices that don't will tend to disappear.

> Man acted before he thought and did not understand before he acted. What we call understanding is in the last resort simply his capacity to respond to his environment with a pattern of actions that helps him to persist…Learning from experience, among men no less than among animals, is a process not primarily of reasoning but of the observance, spreading, transmission and development of practices which have prevailed because they were successful – often not because they conferred any recognizable benefit on the acting individual but because they increased the chances of survival of the group to which he belonged. The result of this development will in the first instance not be articulated knowledge but a knowledge which, although it can be described in terms of rules, the individual cannot state in words but is merely able to honour in practice. The mind does not so much make rules as consist of rules of action, a complex of rules that is, which it has not made, but which have come to govern the actions of the individuals because actions in accordance with them have proved more successful than those of competing individuals or groups. (p18)

Readers are invited to test this set of propositions against their own professional experience in higher education and outside. The idea that much of our professional competence flows from tacit knowledge will be readily accepted. The more controversial application of the quote is (a) the premise that some aspects of professional competence evolve over time without necessarily being centrally directed and (b) the idea that these spontaneous shifts in professional values, practices, knowledge and skills, tend over time to shift the pattern of relative advantage groups have in relation to each other. We tend not to see our disciplinary and professional groupings as competing with each other, but this is a short term perspective. Consider these two points further.

> There is in the beginning no distinction between the practices one must observe in order to achieve a particular result and the practices one ought to observe. There is just one established manner of doing things, and knowledge of cause and effect and knowledge of the appropriate or permissible form of action are not distinct. Knowledge of the world is knowledge of what one must do or not do in certain kinds of circumstances. And in avoiding danger it is important to know what one must never do as to know what one must do to achieve a particular result. (p18)

Hayek is talking not only about the primeval origins of human culture but its ongoing adaptation and adjustment to the contemporary conditions of all periods of history. The idea is that rules of conduct become established because they work, rather than because of more formally understood knowledge about cause and effect. They change at the margin and new practices may become established that outperform old practices. But at any point in time an individual is presented with an established way of doing things – a body of ‘practices that one must observe’. This is not far from the idea

that much professional knowledge is tacitly held. That being so, it might not be difficult for most to accept the idea that there is a degree of spontaneity in the way professional knowledge and skill bases grow, shrink and change over time.

In the absence of professional bodies, this would also mean that the boundaries between distinct specialisms shift fluidly over time as they do in labour markets more generally (including the academic labour market where traditional discipline boundaries are giving way to new interdisciplinary groupings). This is to say nothing more than that the division of labour is constantly re-dividing. But where the division of knowledge (closely related to the division of labour) is organised in some way, by professional bodies for example, the emergence of labour market structure from individual actions is not so spontaneous. It is at least partly planned. Planning might dampen or amplify patterns emerging from individual effects. In our field, professional bodies attempt to exert considerable influence on epistemology, competency and boundary demarcation. What then of the competitive evolution in Hayek's theory as applied to professions?

> These rules of conduct have thus not developed as the recognized conditions for the achievement of a known purpose, but have evolved because the groups who practice them were more successful and displaced others. They were rules which, given the kind of environment in which man lived, secured that a greater number of the groups or individuals practicing them would survive. The problem of conducting himself successfully in a world only partially known to man was thus solved by adhering to rules which had served him well but which he did not and could not know to be true… (p18)

Hayek is making an argument against Cartesian rationalism (after Descartes) – the idea that only *true* knowledge can guide successful action and that *true* knowledge is established by logical deduction from explicit premises. A Cartesian view of education in the built environment would have a body of well formed theory taught in universities as a guide to actions thereafter in the world of practice. Professions would help draw boundaries around a corpus of knowledge with the assumption that successful professional action follows from conscious application of that knowledge. This view is no longer tenable. We know now that knowledge is as much generated in the world of practice as in universities and that much, if not most, successful professional action happens as individuals apply experience and judgement in a way that is hard to codify. If this is how professional knowledge develops and propagates, then the profession's role is necessarily reactive.

Professional bodies still seek to codify knowledge and competencies, however, through curriculum standards, directives, benchmark statements and so on. Equally, universities design curricula to achieve certain goals and professional firms establish rules and cultures of conduct that reduce costs and optimise business. In the modern world, Hayek's pure model of spontaneous order without conscious direction is clearly not the whole picture.

The various kinds of rules consciously created by organisations amount to an extra layer of feedback in the process of spontaneous knowledge discovery. They render that process a little more directed and a little less a product of spontaneous individual behaviour. If the feedback is clear and based on good heuristics or formal reasoning then created rules are likely to result in greater adaptation and less destructive competition (a Schumpeterian idea).

However, to the degree that feedback operates strongly within groups (firms, professions, universities and so on) and only weakly, or secondarily between them, then the Hayekian model still remains a plausible hypothesis of knowledge development and inter-group competition. This is so for two reasons. First, imposed rules that are workable usually reflect more spontaneously adopted values and practices. Governments, professional bodies, firms and universities rarely have success in imposing rules that are a great departure from the existing culture of an organisation. In this sense, such rules may be thought of as reinforcing cultures of learning that have been discovered more spontaneously. Second, even if this were not so and professional codes of conduct were designed purely on the basis of theory created elsewhere (in the universities or in the minds of armchair professional advisors), then it is unlikely that they would govern professional action in any meaningful sense without an unacceptable degree of coercion. This would mean a strong disjunction between the rhetoric of professions and reality on the ground. Curricula, professional competencies and practice would appear to be controlled by formal rules but in reality would evolve by decentralised discovery of good and bad practices.

Individuals, firms and over time, whole professions, fail and succeed in particular actions and functions according to their cultures of learning. Existing professional boundaries are currently being challenged throughout society. This has a variety of causes including the rapid expansion of knowledge, the rise of inter-disciplinarity, an acceptance of complexity and a willingness to question the value of established institutions. Hayek's view of society offers an additional and profound perspective. Skill groups are like any type of division in society. They are organic, constantly evolving in extent, shape and function. At least some of these changes happen without conscious government. New models of contracting, well suited to contemporary technology and economic dynamics, eventually displace other models. Pedagogic approaches in a discipline tend to consistently turn out creatively superior graduates who out perform in job competition and gradually populate new skill niches or contested niches.

What practical insights can readers gain from this discussion? First, the idea that cultures of learning consist of rules seems to be a useful one. Researching the rules that govern learning pre and post graduation would bring new perspective to the skills-education debate. Focusing on rules as a unit of analysis might also provide a new way of correlating educational inputs with employability outcomes. Second, the idea that knowledge is discovered by trial and error and tested through competition should lead

profession bodies to be more relaxed in their attempts to govern learning processes. It should also lead universities to rely more on work-related and other experiential learning. Third, the idea that groups tend to survive by virtue of superior rules should challenge professional groupings and university schools to strive for excellence, look for competitive advantage and take brave decisions. Competition between professions is not a bad thing if it means professional bodies, firms and individuals invest resources in discovering how they can better serve the needs of their clients.

So what questions might the three students bring to Schumpeter's essay? And what rules of learning might cause them to ask those and not other questions? Assuming they learned something from the assignment, what insights might be useful later in their professional lives and what rules elicit those applications? What competitive advantage might this one piece of knowledge give an individual, the firm she works for or owns and what competitive advantage might the aggregation of all such items of knowledge bring to her profession over many decades? I leave these questions for readers to ponder. But for a start, consider the following. The architecture student might consider the styles of building characterising the great boom periods of history and observe that innovation in design often follows the upswing of a business cycle. The brighter students might even try to correlate depth, extent or longevity of design innovation with business cycle wave length. The construction student might consider the scarcity of factors in an upswing and the impact on building quality and safety; or the way in which the clustering of entrepreneurs in an up cycle brings about innovation in uses and therefore technical and legal challenges in construction and post occupancy management. The urban planning student might ask questions about the impact of down-cycles on local economies; the way in which spatial clusters of entrepreneurial activity in an upswing can be diffused or artificially reproduced; and about the pattern of building density and the power to regulate at different positions in a cycle. At some point in their education, students acquire an understanding of the rules that they should adopt in turning data into knowledge – the rules that cause them to ask different questions about the same paper. Once acquired these become second nature and are applied without explicit consideration of their power to create useful knowledge. Nowhere are these more explicit than in essay and examination questions and assignment briefs more generally. These devices shape learning culture in universities in the same way that practical problems shape learning culture in practice.

The survival and continued usefulness of a profession or vocational university subject relies upon continual alignment between these two cultures and it is the learning culture of practitioners who successfully adapt to the needs of society that should probably play the lead role in directing this alignment. Universities are likely to feel that this gives too much responsibility away. But it does not mean being driven by skills agenda and the ephemera and detail of everyday professional life. Academics will always abstract: that is their job. Rather, it means thoughtfully reflecting on what the accumulated body of academic knowledge can bring to real world problems; generating

sharper abstractions; and helping students to ask the questions that will create deep and applicable knowledge.

References

Hayek, F.A. v. (1982) Reason and Evolution. Chapter 1, pp 8 - 34, in Hayek, F.A. (1982) *Law, Legislation and Liberty*. London: Routledge.

Schumpeter, J. (1934) The Business Cycle. Chapter 6, pp 212 – 255, in Schumpeter J. (1934) *The theory of economic development.* New York: Oxford University Press.

Webster, C.J. (2006) Practice-bounded Knowledge. Editorial. *CEBE Transactions* 3 (2), 1-8.