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A new professionalism: remedy or fantasy?

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A new professionalism: remedy or fantasy?

Bill Bordass and Adrian Leaman

Introduction

There has been a diminution of magnanimity in government both central and local, with the public finding itself rebranded as customers, supposedly to dignify our requirements but in effect to make us available for easier exploitation. The faith – which like most ideologies has only a tangential connection with reason – is that everything must make a profit and that there is nothing that cannot be bought and sold.

(Bennett, 2012)

There is widespread agreement that rapid, even step-change, improvements in the sustainability of the built environment are needed, not just for new buildings but for the whole building stock. However, progress in achieving better performance in use has been disappointing. Something seems to be wrong. Are current policies, institutions and delivery systems fit for purpose? Can regulations and markets alone do the job? This special issue considers the roles of built environment professionals and professionalism in creating better outcomes for the common good, and what changes might be needed to their practices, institutions, education and knowledge.

Research into building performance continues to reveal that even the best buildings often fail to perform as anticipated.¹ An important strategic message has been to avoid unmanageable complication and pay more attention to detail. In spite of this, buildings and regulatory requirements seem to become ever more complicated in the name of sustainability, whilst procurement processes do not support the necessary attention to detail. An important reason for this divergence is a poorly closed feedback loop from operational insights into the practices of briefing, design and construction, and regulation. Designers and builders are trained to undertake building work and hand over the keys, not to look into what happens afterwards. Few clients want to pay for anything more. Meanwhile government, which helped to close the feedback loop via its building design, management and research departments,² its free, authoritative publications and with its professionals as intelligent customers,³ tends to have outsourced, privatized or abandoned most of these functions.

In recent decades the authority of building professionals has also diminished in relation to forces characterized by Abbott (1988) as ‘organization’ and ‘commodification’. Could more professionalism help the world respond to the challenges of sustainability? Do practitioners have the appropriate knowledge, skills and practices to support the noble aspirations of their institutions?

Although there was an international call for papers, readers will observe an emphasis on the UK, even by some authors from other countries. There may be two reasons for this. First, professional bodies started early in the UK, in response to the challenges of the Industrial Revolution, with members professing both technical understanding and the independence to balance the needs of client, contractor and society.⁴ Second, the influence of building professionals on UK government has declined rapidly since the 1970s, which may have created a heightened sensitivity to the topic.

A question of ethics

Hill, Lorenz, Dent and Lützkendorf argue that professionals have an ethical responsibility to protect the public good, but their institutions do not give members enough leadership and guidance. Sustainability can fill the moral vacuum, allowing built environment professionals and their institutions to confront the current economic, social and environmental crisis, question the neo-classical economic discourse, take responsibility, and work together in the common interest.

Twenty years ago, clients and the marketplace were regarded as the main barriers to a more sustainable built environment. Now building professionals appear to be part of the problem too. To survive, Hill *et al.* think professionals and their institutions must become truly ethical, maintain a vigorous debate about sustainability, admit what they do not know and commit themselves to learning on the job. Essential skills will include integration, generalism, bridging gaps between theory and practice, and the ability to initiate and manage transformational change. Since the built environment professions are

so interconnected, any search for a ‘new professionalism’ must unite them all. The authors also suggest a specific role for ‘Futures Professionals’, who can share knowledge, explore its limits and speak out for the benefit of all.

Changing institutions

From a different perspective, Hughes and Hughes echo the themes explored by Hill *et al.* The building professions emerged during a period of rapid industrialization, which also makes them in demand in developing countries today. As a country develops and standards emerge, some professional roles can be replaced by statutes, standards and contracts, while new roles emerge in new areas of uncertainty.

The concept of a profession gives members a sense of identity and recognition, reinforced by legal and insurance requirements. However, not all the current institutional functions (*e.g.* as learned societies and communities of practice) require a professional institution, while others (*e.g.* conditions of engagement and contracts) tend no longer to be prepared profession by profession, but for all team members. Hughes and Hughes see the survival of the built environment professions as critically dependent upon their response to the challenge of sustainability, reinforcing the view of Hill *et al.*, and of several other papers in this special issue.

A middle role

Janda and Parag argue that policy measures are often applied top-down (*e.g.* by regulation) or bottom-up (*e.g.* targeting individuals as actors), but fail to appreciate the role of those in the middle (which includes most building professionals) in getting the job done. But if the insights of those in the middle are not obtained when planning; and if they are not properly involved, motivated, informed or trained when it comes to implementation, well-intentioned programmes can easily suffer.⁵

Influence from the middle can be upwards (*e.g.* to policy-makers), downwards (*e.g.* to customers) or sideways (*e.g.* to peers and organizations with whom they work), for example spreading the word, gaining new skills or forming new alliances to address emerging issues. Modes of operation include *enabling*, *mediating* and *aggregating*.

An example of the *enabling* role is how a handful of UK designers have been able to produce dwellings with extremely low heating energy requirements. Before these trailblazers, such standards had been regarded as unachievable by British industry, or at least not for many years.

The *mediating* role is where the middle adapts a standard approach to a particular context, taking account of the opportunities and constraints.

Aggregation allows improvement programmes to reach beyond individual buildings to portfolios, *e.g.* owner, occupier, property manager, facility manager, surveyor or maintenance contractor portfolios of commercial buildings. This can create economies of scale and opportunities for learning from one project to the next.

Professionalism in a digital world

Jaradat, White and Luck consider the role of the building professional in relation to the large, integrated digital systems of project delivery that many see as the key to better-integrated design, production and management information. However, the research, based on interviews, found that Building Information Modelling and management (BIM) systems could also disturb existing work practices. BIM provided accountability, but blurred responsibility and reduced professional autonomy. It could also be unforgiving. By imposing constraints on the ways people could do their work, these new systems also reduced flexibility and created new opportunities for error.

The authors observed a professional system being replaced by a bureaucratic one, often driven by large clients. This created new challenges, *e.g.* in trying to input the uncertain into a system that was only able to accept what was known, or allowed. There was a subtle shift in the production process from providing professional expertise to having inputs monitored; meeting the demands of a process, but not getting the job done in the most appropriate way to suit the context. The management of the information threatened to become more important than the content.

The overall implications of BIM for professional practice and the quality of its product have been little studied and are yet to be understood. Will something important be lost? Or will the methods and their users co-evolve in a sympathetic manner? In the project studied, new divisions of labour were already emerging to accomplish new tasks (*e.g.* the appearance of professional document managers) and to consolidate old ones (*e.g.* with documentation such as operating manuals being produced by dedicated technical authors, and no longer by the designers).

A shared professional identity

Hartenberger, Lorenz and Lützkendorf argue that building professionals have no shared sense of purpose, no shared identity and no equivalent of the Hippocratic Oath. They consider what can be learnt

from medicine,⁶ another diverse profession, but with a common purpose and a closed loop between practice, research, education and training. Over the past 20 years, the medical profession has become more accountable; and the training broader, and more problem-oriented than subject-based. The interdisciplinary structure of education and training appears to play a pivotal role in creating a shared identity and goal for these professions.

The authors propose a similar model for building professionals, with a 'Built Environment Fellowship' at the core: its goal is a sustainable built environment, based on a common understanding of individual and collective responsibility. Education and training would aim to strengthen cooperation and this sense of responsibility; foster links between research, education and practice; seek to extend competence and excellence beyond a single discipline; and help individuals to be self-motivated, self-monitoring and to motivate others. The authors also advocate temporary university chairs for practitioners, to help develop concepts, principles and material that link education and practice.

Government clients

In the United States, the General Services Administration (GSA) is the federal government's 'landlord', owning nearly 10 000 buildings. Bonham explores its role as a large, intelligent client capable of moving practice forward. Over the years, GSA has enhanced its procurement processes to include design review charrettes, building performance matrices to track key design criteria through the procurement process, detailed energy analysis, BIM, and enhanced commissioning with measurement and verification. It has also been developing and applying a range of methods of post-occupancy evaluation. In many ways, this parallels the objectives of the UK's 'Soft Landings' process, and demonstrates how a government agency can provide leadership in professional and industry practice, and help innovations to 'cross the chasm' (Moore, 1990).

A key lesson is that public sector clients need good technical capabilities, so they can capture technical insights and take a proactive role. As examples, the author cites two specific projects: the Denver Courthouse, a pathfinder for radically improved performance in terms of sustainability; and a new building at the National Renewable Energy Laboratory (NREL) that aimed for LEED Platinum and half the energy use at no extra cost. On an annual cycle, GSA now solicits proposals for demonstrating innovations on its projects, so that manufacturers can have a proving ground to help bring products to market. An integrated solar air collector was successfully demonstrated at the

NREL building, where its performance exceeded expectations.

The business of professional practice

Construction professional services firms (CPSFs) have been little studied. In the UK, they grew rapidly in the 1980s, partly due to outsourcing of many functions by government. The organization of CPSFs also changed, as fee competition reduced the cost (and sometimes the quality) of their standard services and created opportunities for thinking up additional ones. Connaughton and Meikle review how the largest UK CPSFs have changed in the past 30 years.

In *The System of Professions* (1988), Abbott characterizes professional services firms as having deep domain knowledge; a strong focus on areas of complexity and uncertainty; the ability to customize their services, with face-to-face interaction; and a strong thread of service excellence and ethical behaviour. But CPSF multinationals are more likely to focus on management targets, e.g. shifting the work and maintaining the cash flow. More research is needed to confirm what is happening and to understand the implications.

Abbott (1988, p. 324) saw professionalism in competition with two alternative forms of structuring expertise: commodification and organization. In the world of building professionals, both seem to have gained ground: commodification in the business trends that Connaughton and Meikle describe, while organization permeates both these corporate conglomerates and the ever-increasing requirements for compliance with government regulations and voluntary codes. Is trust and judgment being replaced by procedures, management and accountability? Is this good, bad or inevitable? What aspects of professionalism need to be retained?

Professionalism and business

Aho's commentary picks up the thread of bridging the gap between individual professionalism and business expectations. Long-term sustainability demands big changes, but business tends to focus on short-term financial performance and ignores the longer-term, whatever individual professionals might desire. A professional needs not only specific competences and qualifications, but also a work ethic that balances the immediate business needs with the wider good. Few if any service-level agreements mention this, so managers can easily brush it aside as irrelevant.

In spite of growing evidence that more sustainable buildings are better investments, the inherent structural characteristics of the construction and property industries inhibit the transformation required. Incentives always tend to maximize cost savings, not value

added. To break the deadlock, Aho proposes: (1) business incentives related to long-term performance of facilities and the value delivered: a higher reward, a higher price; (2) professionals within businesses empowered to act according to long-term goals; and (3) sufficient short-term returns to finance the first two.

Barriers to this change include difficulties in quantifying the performance required and achieved, and a need to consolidate the fragmented construction value chain, which can have hundreds of organizations involved in a single project. Private finance initiative (PFI) and private–public partnership (PPP) projects appeared to be promising developments, but experience in practice has been disappointing, perhaps because clients have tended to emphasize finance over performance. Aho asks whether the energy performance contracting approach could be extended to other aspects of building performance.

A business model based on value achieved will need strong support from owners and clients, who should be interested in having more sustainable investments. Many have already adopted environmental rating systems such as BREEAM and LEED which assess inputs. Far less thought has been put into what business models could support good outcomes.

Professionalism and architecture

Duffy and Rabeneck outline the trajectory of architects in the UK, from John Soane's definition of their professional role in the 18th century; through their heyday from the 1940s to the 1960s; to their decline since the 1970s in the face of recession, free markets and deskilling of government clients. Today, the professional principles of trust, the public good, and mediation between demand and supply are urgently needed to respond to the challenges of sustainability.

Why was the decline so steep? The authors cite Ulrich Beck's argument that secure connections between research, practice and education are essential for a profession to obtain social consent. Building professionals are weak in this respect, going from one project to the next without amassing a body of shared knowledge on building performance. When government employed large numbers of building professionals, it helped to fill the gaps in many ways. When it abandoned, privatized or outsourced its design, property and works departments, research units and national laboratories, these insights were lost. Since the institutions failed to adopt these tasks, or enough of them, their credibility has been eroded.

What is the future for a professional architect today? Duffy and Rabeneck identify several scenarios: the most promising is collaborating with others to work

for the public good, underpinned by a strong, shared body of knowledge about building performance in use. They identify positive precedents for collaborating and gaining knowledge: including the Harvard Business School case study approach, and the work of informal interdisciplinary groups, such as The Edge.⁷ Activities such as these can allow useful things to get going quickly, without the need for formal institutional support.

Professionalism and the modern media

Twinn, an engineer now working in China, sees parallels between the situation there today and in Britain during the Industrial Revolution: rapid growth, few safeguards and government finding it difficult to exercise control. Now as then, this creates an important role for professionals as mediators. Today, however, Western professionals are too often the handmaidens of corporations.

In confronting the challenges of sustainability, all societies need professionals dedicated to the long-term common good. In the UK, Twinn has observed the profile of building professionals diminishing, taken over by personalities from businesses, the media and pressure groups, with shallow knowledge but strong media exposure. He finds professional institutions too fragmented, too slow and lacking clarity in their communication with society. When faced with new challenges, they tend to multiply, not converge. On matters of common interest like sustainability, each has its own version.

Twinn advocates that professional institutions must come together to provide a common view, particularly in formulating policy recommendations. Institutions must support more integrated services, and be repositories of freely available knowledge that can benefit everyone; and have firm foundations in evidence of how buildings actually work and how policies translate into practice.

Discussion

Strong themes unite many of the papers. Most authors agree that professionalism has been eroded by short-termism, bureaucracy and outsourcing of technical skills by government. Accountability is replacing trust, reflecting what has been happening in wider society – the unintended consequence of replacing ethics by rules and regulations, and leaving everything else to the invisible hand of the free market. Yet the world today is in great need of professional independence, judgement and responsibility for the public good. Markets need reconnecting with values. Urgent challenges include dealing with rapid growth in

developing countries, diminished resources in developed ones and sustainability everywhere.

Built environment professionals cannot escape their ethical and practical responsibilities, but do they have the knowledge and skills to respond? Can they regain the trust of the public, especially now that the challenges of sustainability have changed all the rules? Their knowledge base, their institutions and their authority have been weakened, owing to the ways in which they, their clients and society as a whole have co-evolved. Most processes now used for procuring building-related work are designed to cut costs in the short-term. The introduction of competition at all stages tends to sever the thread from design intent to reality, and results in a dearth of feedback. This makes many professionals poorly equipped to deal with the practical challenges of sustainability.

Today's tasks for building professionals include adding much more value with fewer natural and financial resources, and not just minimizing negative consequences but helping to bring about regenerative change (e.g. Cole, 2012). Truly sustainable solutions require a broad view, responsiveness to context and attention to detail. Better outcomes also require innovation: purposeful and painstaking improvement to processes, techniques and technologies, based on knowledge of what actually works in practice and what needs improving, or abandoning. Gratuitous technical novelty may look good in the virtual world, but not in the real one.

With an understanding of building performance in use, one can concentrate on the things that will make the most difference. Unfortunately, building professionals have not developed a robust body of knowledge about what happens after construction work is finished. As differences between expectation and reality have widened, confidence in professionals has diminished. This has also left professionals poorly equipped to deal with the practical challenges of sustainability.

Can building professionals and their institutions adapt, given the institutional inertia, and an accelerating trend towards regulation and free market competition? The authors offer similar, overlapping prescriptions. These include a strong ethical stance; a shared identity; convergence of institutions and education towards a common purpose; the ability to reach shared but diverse views and to communicate them clearly; and a robust and openly accessible knowledge base. Although precedents for institutional collaboration are not encouraging, the authors see glimmers of hope, in particular from examples of linking education, practice and research; and the vision, dedication and creativity that emerges when diverse groups of building professionals come together.

Governments once acknowledged that the health of the building stock was in the national interest, so undertook research and provided advice and guidance. Now they are more inclined to create regulations (too often in ignorance of the real priorities) and leave things to the market. When governments turn to the construction industry for solutions, they often make a category error. The domain of building use overlaps only slightly with the world of construction. Buildings are a national resource (Kohler and Hassler, 2002) that last a long time and continue to evolve, long after their creators are gone (Brand, 1994). Their performance is the result of the actions of many players, not only the construction industry. The outcomes are in the public interest, not just that of the client, owner and occupier. There are many ways to improve performance without going near the construction industry, which tends to define the solution to any problem as a construction project.

In his seminal book, Abbott (1988, p. 324) thought 'professionalism' had stayed ahead of 'commodification' but might lose out to 'organisation'. In the ensuing 25 years, commodification has led to more standardized products and processes. Organization is reflected in the dominance of management over technical skills in industry and government, with more regulations and bureaucracy. The two forces have combined in the trend to larger, often multinational, organizations, which employ building professionals as part of the organizational machine, but constrain their independence. The 'middle' role of built environment professionals has been undervalued: they should be imagining ways forward, testing them in practice, and developing the knowledge and capacity to apply them at scale. Professionals have a leadership role in advance of regulation: the 'middle' role entails both practical demonstration of improved approaches and the persuasion of clients, stakeholders and civil society of the public good that arises from these.

Abbott's forces of commodification, organization and professionalism actually work in a dynamic balance. As time passes, activities that once required judgment become codified, organized and commoditized, while new areas of promise and challenge arise. The issue of sustainability has put the common good back at the top of the agenda; regulations and markets have been found wanting. There is a need for professional ethics, judgement and leadership. Can building professionals and their institutions respond effectively, and will they be listened to?

What next?

The papers in this special issue confirm the need for a wider examination of the developing nature of

Table 1 Elements of a new professionalism

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1. Be a steward of the community, its resources and the planet.
Take a broad view
 2. Do the right thing, beyond your obligation to whoever pays your fee
 3. Develop trusting relationships, with open and honest collaboration
 4. Bridge between design, project implementation and use.
Concentrate on the outcomes
 5. Do not walk away. Provide follow-through and aftercare
 6. Evaluate and reflect upon the performance in use of your work.
Feed back the findings
 7. Learn from your actions and admit your mistakes. Share your understanding openly
 8. Bring together practice, industry, education, research and policy-making
 9. Challenge assumptions and standards. Be honest about what you do not know
 10. Understand contexts and constraints. Create lasting value.
Keep options open for the future
-

Note: This is a working draft prepared by Bill Bordass for The Edge (an interdisciplinary group of built environment professionals) (see <http://www.theedge debate.com>).

professionalism and its role in society in different national contexts. Themes include ethical codes, institutions, business models; and effective links between practice, research, education, policy-making and the public. The Guest Editors see an urgent need to undertake and learn from early action. While institutions are slow to change, Hill *et al.* show that some professional and governmental codes already contain strong, general statements about ethics and sustainability. Individual professionals could adopt these tomorrow. Key requirements include a shared vision, better processes and a greater knowledge about building performance in use.

A shared vision

This could be the core of a new professionalism that unites all built environment professionals, their institutions and their educational systems – the equivalent of the Hippocratic Oath advocated by Hartenberger *et al.* Table 1 illustrates what some shared elements might be. This, or something like it, could potentially be adopted voluntarily by individuals until something more definitive was agreed and enacted by the relevant institutions.

Better procurement processes

At present there is much enthusiasm about BIM, but one can also see this as a manifestation of Abbott's *organisation* and *commodification*. The mechanics need to be accompanied by a personal and professional angle. For example, any client or team can adopt the Soft Landings approach (Way and Bordass, 2005; Way,

Bordass, Leaman and Bunn, 2009) and graft it onto any existing procurement system for building-related work. Its key features include a focus on outcomes from inception and into operation; expectations management during design and construction; and a better handover, followed by a period of aftercare and post-occupancy evaluation. Trials of the procedure have demonstrated the importance of client commitment and for at least one person on the team to take on the role of *champion* to see things through – very much an activity for a new professional.

Knowledge about building performance in use

Again, individuals, teams and firms can decide to put more effort into understanding and improving the outcomes of their own projects. Who should hold the knowledge base of the results obtained? The strong public interest dimension of building performance makes it important that it is not the sole province of the construction industry and built environment professionals. There is a need to establish public interest organizations that collect and review information of this kind, and extract the strategic and tactical lessons for the benefit of all, including policy-makers, professionals and the public. In the UK, we are seeking support for an independent Institute of Building Performance.

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References

- Abbott, A. (1988). *The system of professions: An essay on the division of expert labour*. Chicago, IL: University of Chicago Press.
- Bennett, A. (2012, November 8). It starts with an itch. *London Review of Books*, 34(21), 19–20.
- Brand, S. (1994). *How buildings learn*. Viking Penguin, New York.
- Building Research & Information*. (1997). 'The Future of National Building Research Organisations'. *Building Research & Information* 25(5).
- Building Research & Information*. (2001). 'Post-occupancy Evaluation'. *Building Research & Information*, 29(2).
- Cole, R. J. (2012). Regenerative design and development: current theory and practice. *Building Research & Information*, 40(1), 1–6.
- Kohler, N., & Hassler, U. (2002). The building stock as a research object. *Building Research & Information*, 30(4), 226–236.
- Moore, G. A. (1990). *Crossing the chasm: Marketing and selling technology products to mainstream customers*. HarperCollins, New York.
- UK Government. (1971). *A framework for government research and development* (Green Paper; Rothschild Report). London: HMSO.

Way, M., & Bordass, B. (2005). Making feedback and post-occupancy evaluation routine 2: Soft Landings: involving design and building teams in improving performance. *Building Research & Information*, 33(4), 353–360.

Way, M., Bordass, B., Leaman, A., & Bunn, R. (2009). *The Soft Landings framework*. Bracknell: Building Services Research and Information Association and Usable Buildings Trust (BSRIA BG 4/2009). Retrieved from <http://www.usablebuildings.co.uk>

Endnotes

¹For example, see the Probe project special issue ‘Post-occupancy Evaluation’. *Building Research & Information* (2001), 29(2).

²See the special issue ‘The Future of National Building Research Organisations’. *Building Research & Information* (1997) 25(5). 1997 was the year the UK Building Research Establishment was privatized.

³A term introduced in the UK Government’s (1971) Green Paper, widely known as the Rothschild Report.

⁴In some other countries that were later to industrialize, government took on more of this responsibility, e.g. in Germany.

⁵For example, in the 1990s a UK policy to promote condensing boilers was frustrated because installers lacked confidence in the technology; and in 2010 an ambitious Australian home insulation policy had to be scrapped when the consequences of poor work by installers led to fires and electrocutions. In the aftermath of the Australian debacle, the UK government’s proposed Green Deal is setting up elaborate quality assurance systems. The Guest Editors fear these could create excessive bureaucratic and financial overheads. The government now seems to be attempting to put what might be regarded as middle-out attributes into its scheme.

⁶In the 1970s, one of the Guest Editors (A. L.) proposed the creation of a Clinical Unit for the Built Environment (CUBE) which took its brief from the medical research model.

⁷See <http://www.edgedebate.com>