

University of Cambridge, IDBE Course
Design for Survival 19 July 2013

NEW PROFESSIONALISM

ethics for a sustainable world

***Building professionals and the
challenge of sustainability***

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www.usablebuildings.co.uk

Some things the Usable Buildings Trust has been doing since inception in 2000

Raising awareness of building performance in use:

- Seeking to make building evaluation and feedback routine.
But we got a surprise when we worked with large clients.
- Drawing attention to the gaps between intentions and outcomes.
- Providing information and bringing people together.

Helping to make performance visible:

- Free support to the BUS occupant survey by postgraduate students.
- Advocating Display Energy Certificates (DECs) based on actual energy use *and helping to demonstrate how they could be implemented.*
- Developing a Landlord's Energy Statement to assist DECs in commercial buildings, *for which DECs sadly are not yet mandated.*

Encouraging client, design and building teams to focus on outcomes:

- Advocating a *New Professionalism* for the building professions.
 - Helping to develop *Soft Landings*, to improve the focus of all building procurement processes on performance in use.
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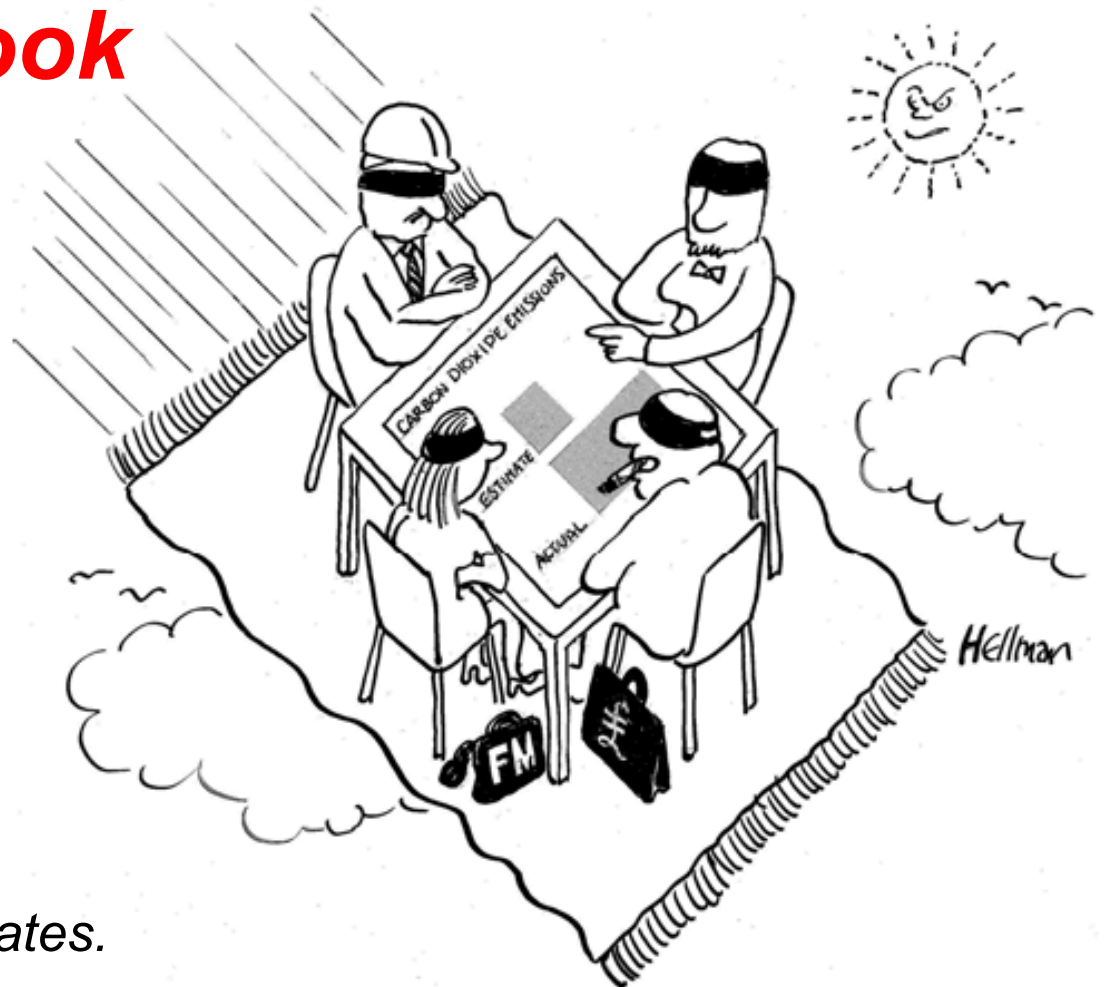
What is unusual about buildings?

- They are very slow-rotation products, lasting for decades or centuries. *Faster change creates economic activity, but will it be sustainable?*
 - They are multi-purpose and systemic, and serve many and changing purposes over the years. *It's their capabilities that are important.*
 - Good performance is in the national interest ... *but the construction industry is more interested in doing projects and capturing customers.*
 - There is very little feedback of performance to their creators, *who tend to disappear as soon as a project is completed.*
 - Government used to close the feedback loop, e.g. with maintenance, technical services and research departments and the BRE... *but now nearly all have now been privatised and outsourced.*
 - The role of innovation is widely misunderstood – *not so much about whizzy new technologies, as bringing people, processes and things together in slightly different ways to give markedly better outcomes.*
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In the 1990s, there were often big gaps between design claims for low-energy buildings and in-use performance

but nobody took much notice

Cover of the 2001 report "Flying Blind", that advocated making in-use performance visible and actionable, starting with energy certificates.



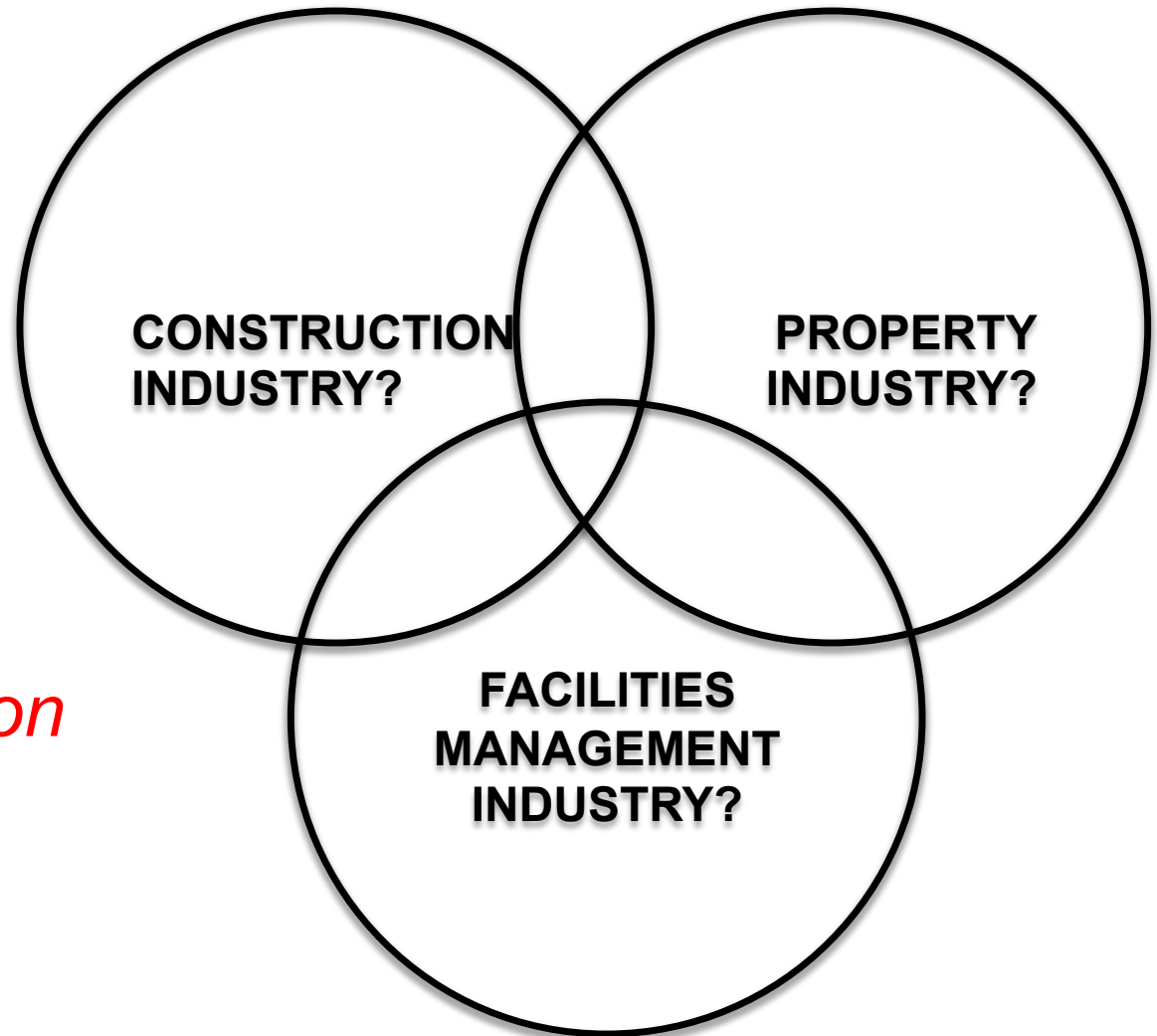
Graph based on an energy survey in 1998 of an office building that won a major sustainability award in 1997.

CREDIT: Hellman cartoon for W Bordass, *Flying Blind*, Association for the Conservation of Energy & OXEAS (2001)

Which industry and market is really responsible for building performance?

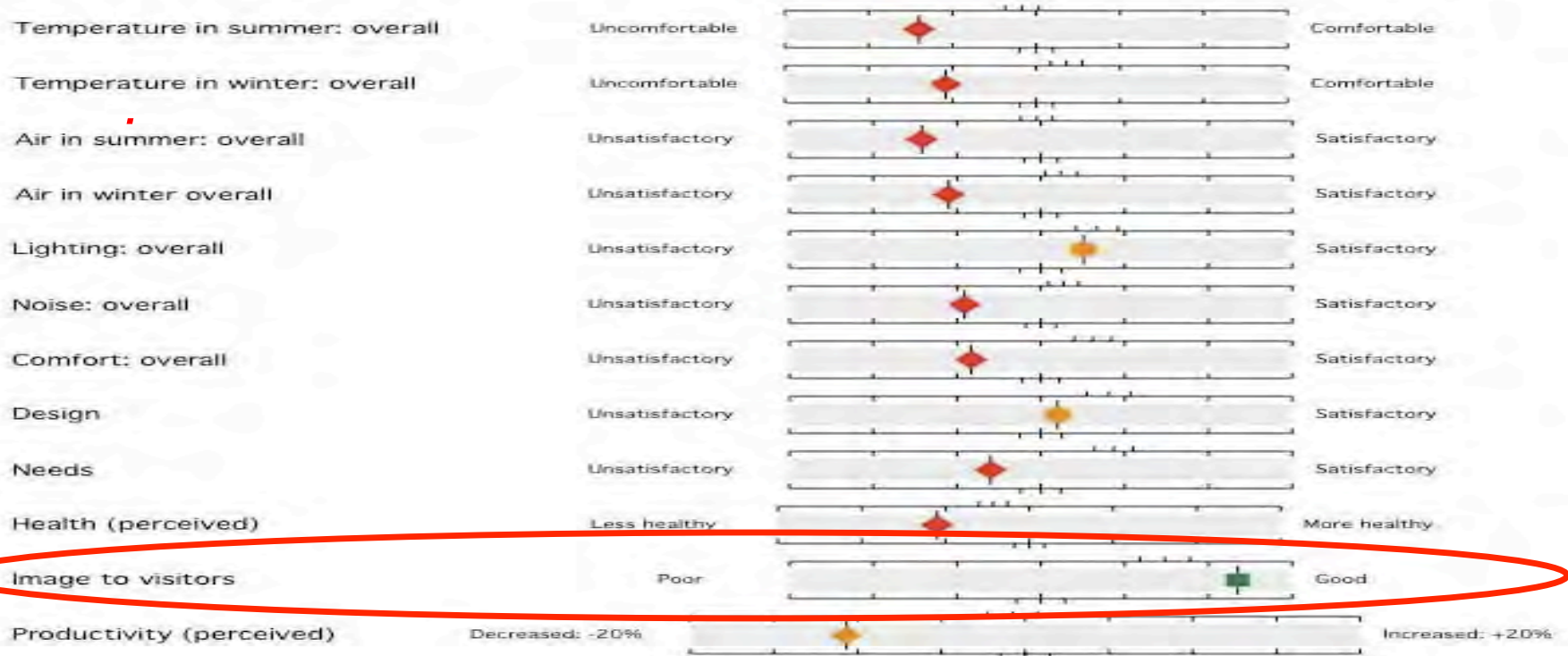
None of these:
it's much more
complicated
than that.

*The lack of traction
is not a market
failure, but a
category error!*



The gaps are not only for energy: *occupant survey, multi-award-winning school*

RED: below average; AMBER: Average; GREEN: Above average



“ ... the architecture showed next to no sense. It leaked in the rain and was intolerably hot in sunlight. Pretty perhaps, sustainable maybe, but practical it is not.” ... STUDENT

The gaps are not only for energy: *Knowledge base for retrofit*



Responsible Retrofit of Traditional Buildings

A REPORT ON EXISTING
RESEARCH AND GUIDANCE
WITH RECOMMENDATIONS

STBA
SUSTAINABLE TRADITIONAL
BUILDINGS ALLIANCE

SOME CONCLUSIONS

Industry and policy lack understanding of traditional building performance.

Lack of connection between research intelligence and guidance procedures.

Significant uncertainty in application of models and software.

Some methods used are inappropriate.

A systemic approach is necessary to avoid unintended consequences.

There are good opportunities, but some will need to be developed using a rather different basis and structure.

So where are we now? *A confused situation*

- Building performance is confused with construction and markets.
- Building-related policy measures don't join up, *often conflicting rather than converging effectively onto actual performance in use.*
- Policies add complication, *instead of helping people to focus on what really needs doing to get things to work better.*
- Salami-sliced, transactional procurement processes not fit for purpose.

... and FOR BUILDING ENERGY PERFORMANCE IN USE:

- Government has failed to provide core technical infrastructure that could help organisations, individuals and markets to self-organise: *e.g. no investment in in-use benchmarking for more than a decade.*
 - Designers are trapped in the ghetto of “Regulated Loads”.
 - DEC's that do disclose performance are being sidelined by DCLG.
 - Too much emphasis on carbon. *First energy, then carbon.*
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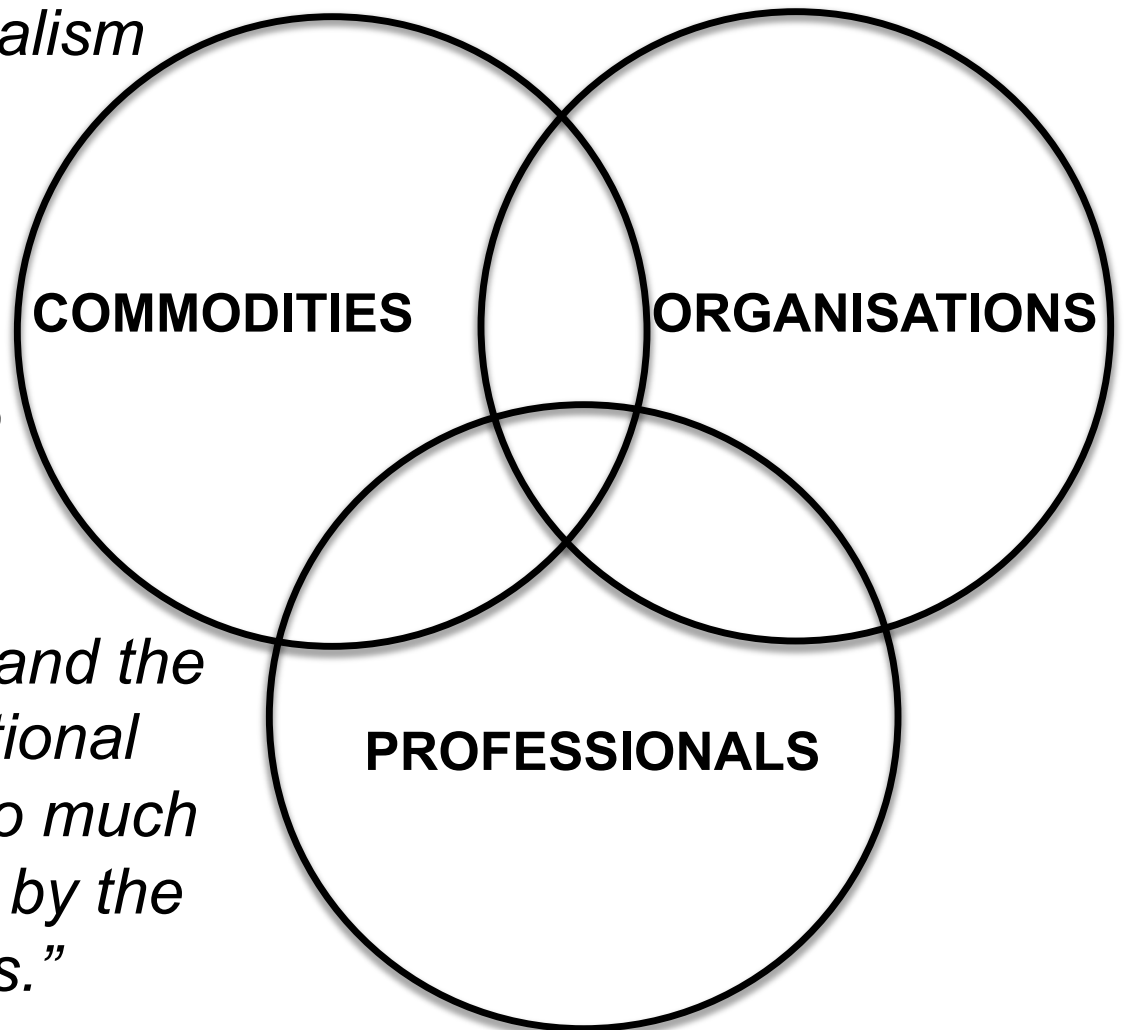
How societies structure expertise

“At present, professionalism seems to hold its own.

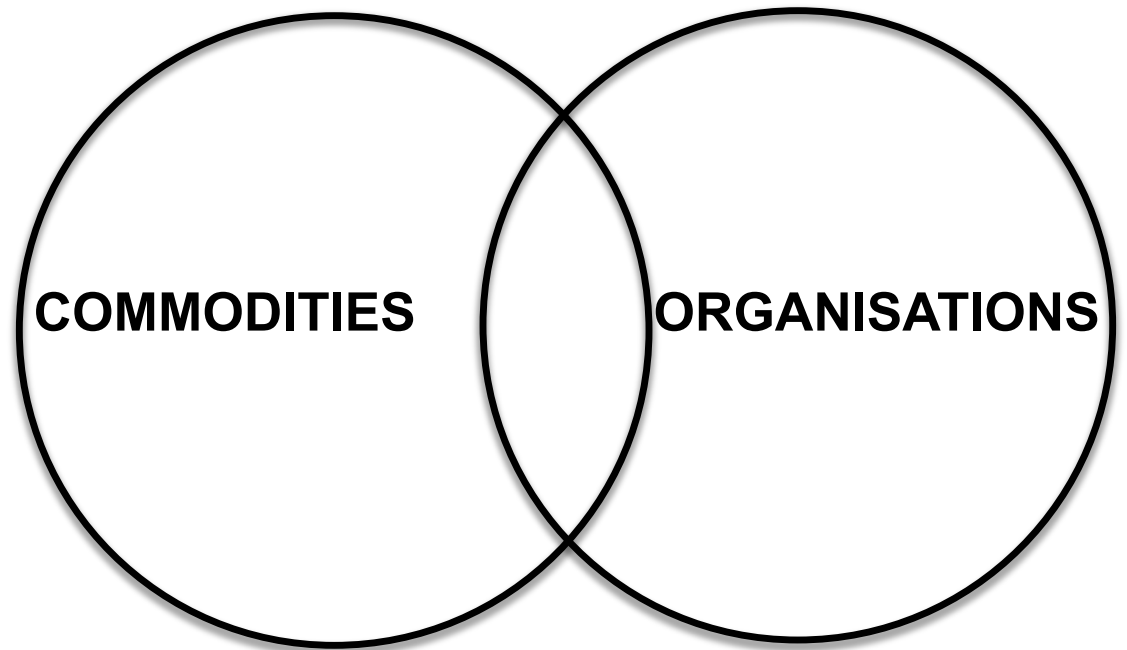
It has stayed ahead of commodification ... but may ultimately lose out to organisations ...

new hiring patterns ... and the loose form of organisational professionalism point to much weaker control of work by the professions themselves.”

ABBOTT (1988)

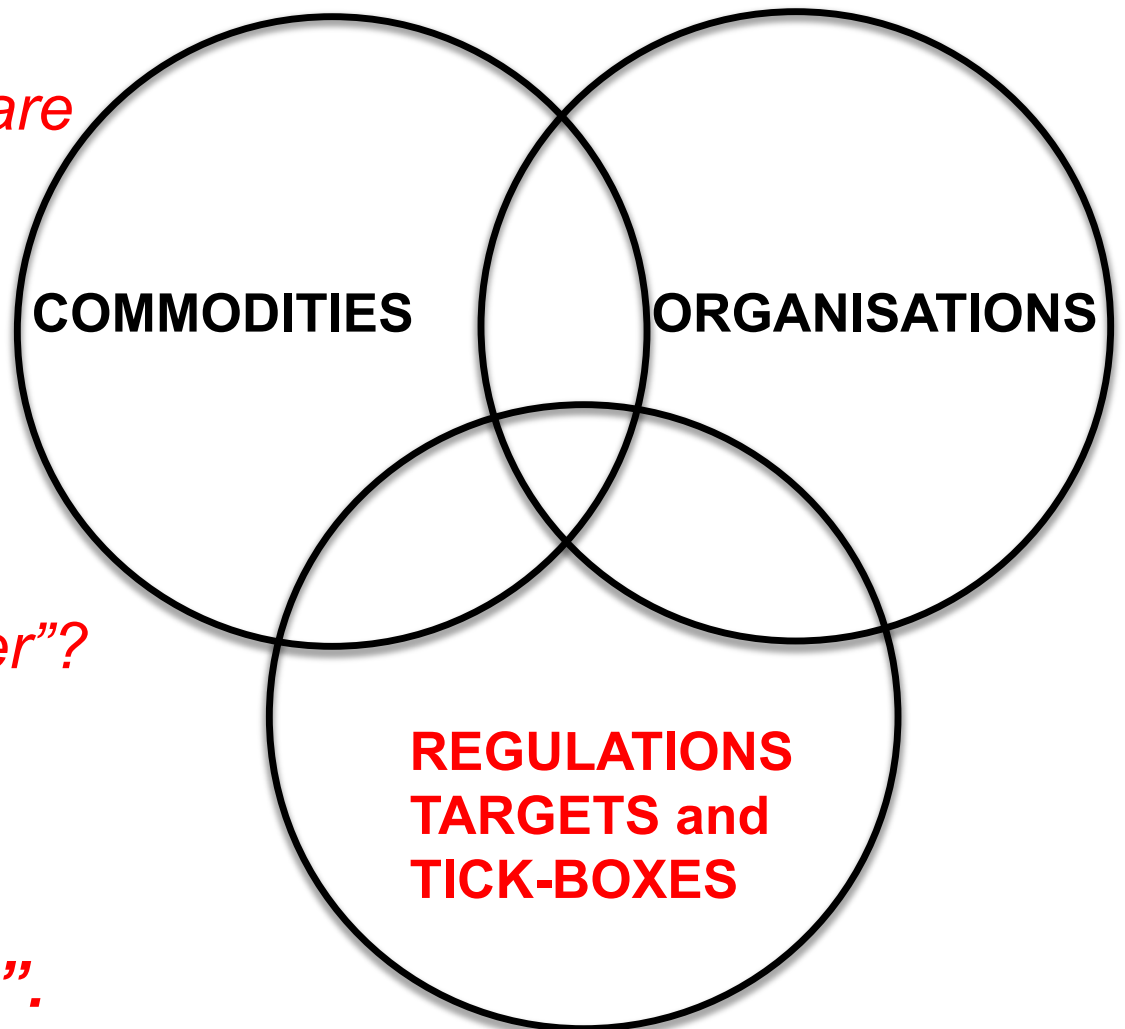


Where we seem to be now in the UK ...



... or perhaps

But do the regulators understand what they are doing? With so much outsourced, where are the institutional memory, the vision, the integration, the public interest, and the “intelligent customer”?



“British government is no Rolls-Royce. It is barely motorised”.

ANTHONY KING, *Professor of Government, University of Essex.*

Is this really enough?

- How do you take proper account of context?
This is where professionalism comes in and artificial intelligence has been struggling.
 - Caring is not something you can reduce to rational procedures and rule systems. It needs ethics,
as we have been seeing recently in many other sectors.
 - You can't predict everything in complex systems,
there will always be unexpected consequences.
 - You can't legislate for innovation,
and innovation in buildings is not just technical.
 - **Big myths and category errors result, and the processes can become the disease they hoped to cure.**
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Jane Jacobs: *Only two moral syndromes*

Commercial moral syndrome

Shun force

Come to voluntary agreements

Be honest

Collaborate easily with strangers and aliens

Compete

Respect contracts

Use initiative and enterprise

Be open to inventiveness and novelty

Be efficient

Promote comfort and convenience

Dissent for the sake of the task

Invest for productive purposes

Be industrious

Be thrifty

Be optimistic

She argues that attempts to blend them tend to create “*monstrous hybrids*”.

Jane Jacobs: *Only two moral syndromes*

Commercial moral syndrome	Guardian moral syndrome
Shun force	Shun trading
Come to voluntary agreements	Exert prowess
Be honest	Be obedient and disciplined
Collaborate easily with strangers and aliens	Respect hierarchy
Compete	Adhere to tradition
Respect contracts	Take vengeance
Use initiative and enterprise	Treasure honour
Be open to inventiveness and novelty	Be loyal
Be efficient	Be ostentatious
Promote comfort and convenience	Make rich use of leisure
Dissent for the sake of the task	Deceive for the sake of the task
Invest for productive purposes	Be exclusive
Be industrious	Show fortitude
Be thrifty	Dispense largesse
Be optimistic	Be fatalistic

She argues that attempts to blend them tend to create “*monstrous hybrids*”.

In any event, the role of the building professional needs re-defining

- There's a big job to do, *in making new and existing buildings more sustainable.*
 - We're short of money:
we can't afford to spend it on the wrong things.
 - Our current procurement systems are not fit for purpose:
we need to do things very differently.
 - We can't change everything tomorrow ...
but we can change our attitudes to what we do.
 - It's not a question of whether we can afford to do it:
We can't afford not to !
 - WHEN DO WE START?
TODAY. *We can't wait until 2050!*
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Changing the way we do things

- Most construction-related institutions require members to understand and practice sustainable development.
- How can members do this unless they understand the consequences of their actions? *The real outcomes.*

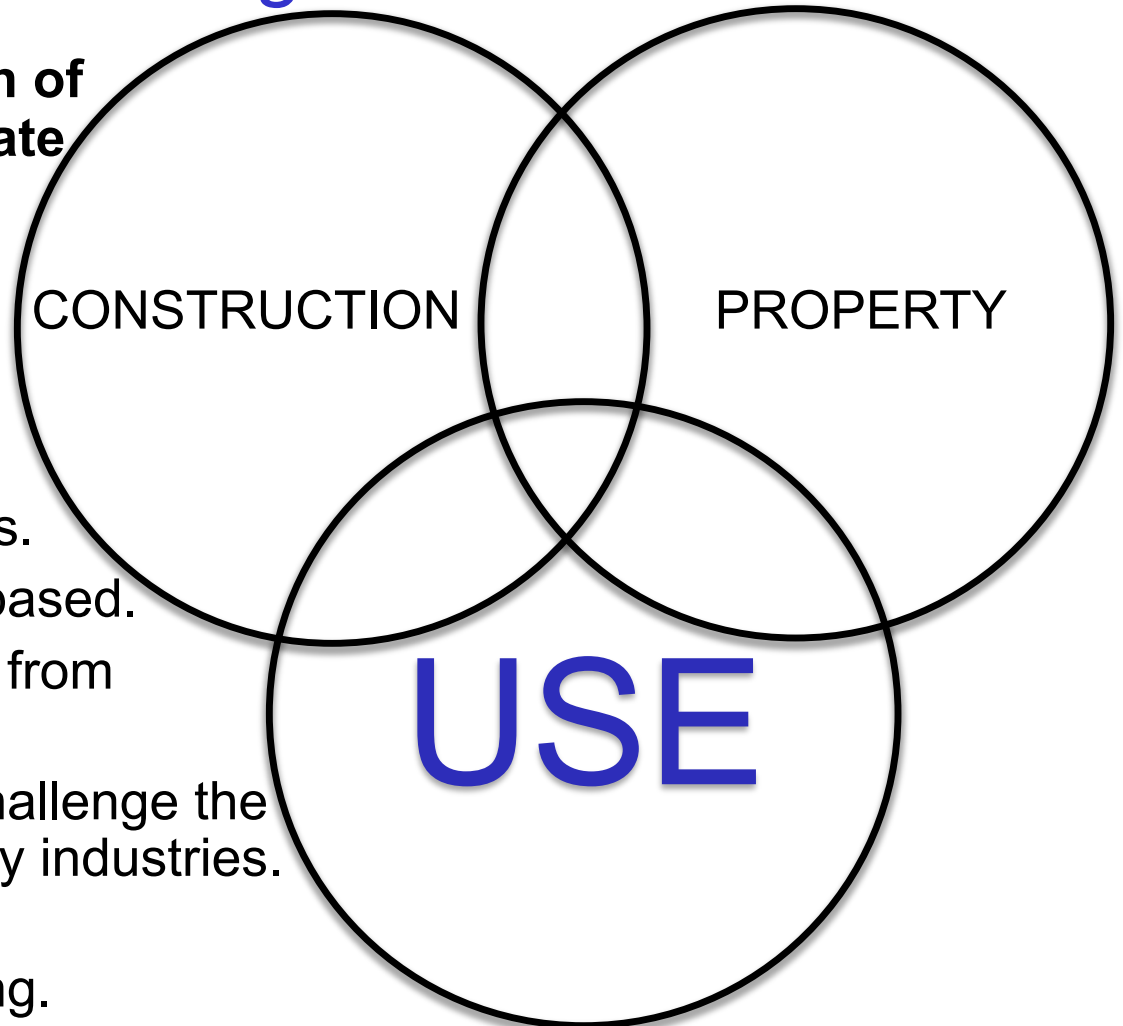
SO HOW ABOUT?

- Changing attitudes to the nature of the job.
 - Re-defining perceptions of the professional's role, to follow-through properly and to engage with outcomes.
 - Closing the feedback loop – rapidly and efficiently.
 - Making much more immediate, direct and effective links between research, practice and policymaking.
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How about an independent *Institute of Building Performance?*

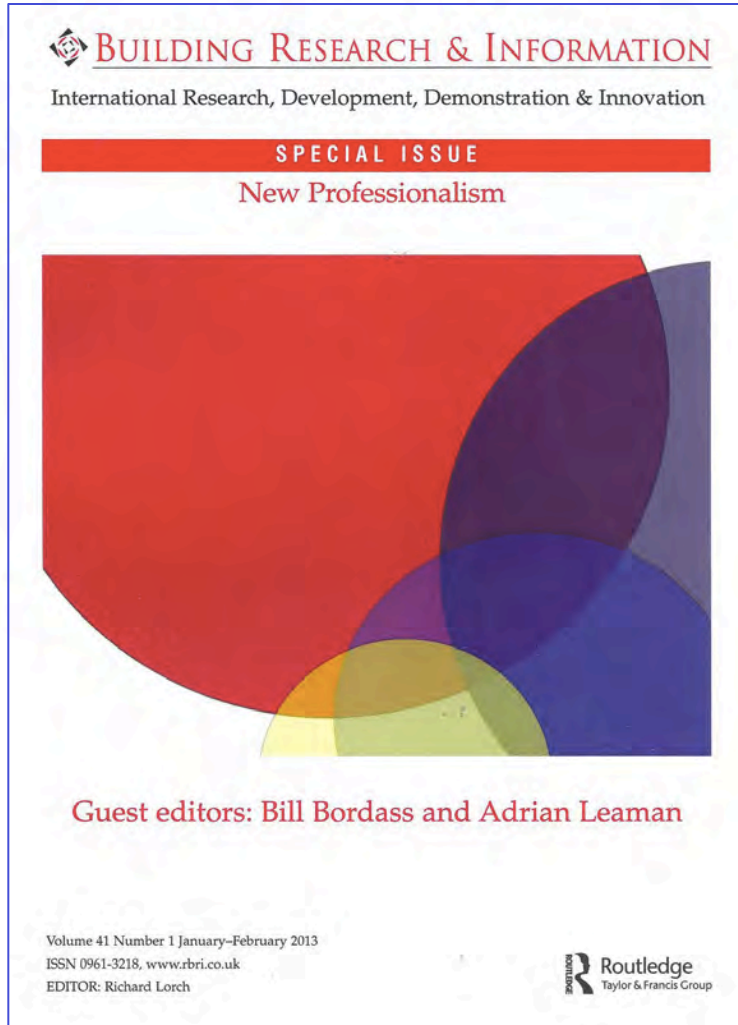
Strengthen representation of BUILDING USE. Help create demand-side leadership.

- Public interest.
 - Independent.
 - Interdisciplinary from the start. No historic silos.
 - Authoritative, evidence based.
 - Can bring together work from many different sources.
 - Can both support and challenge the construction and property industries.
 - Connects research, practice and policymaking.
 - Institute for Fiscal Studies is a possible analogue.
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New Professionalism: getting started

Principles anyone could adopt tomorrow



PROVISIONAL LIST DEVELOPED WITH THE EDGE

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. Don't 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 policymaking.
9. Challenge assumptions and standards. Be honest about what you don't know.
10. Understand contexts and constraints. Create lasting value. Keep options open for the future.

And what is this the antidote to?

The new (or old?) big corporatism

1. Pretend to be a steward of the community and the planet,
but always put your own and your organisation's interests first.
 2. Trumpet your ethics, *but always work strictly within the terms of your appointment and never question its appropriateness.*
 3. Base relationships on roles and contracts, never on trust.
 4. Focus strictly on your own areas of activity.
Transfer responsibilities onto others where possible.
 5. Terminate your involvement as soon as the work ceases to be profitable.
 6. Do not share knowledge with others.
 7. Never admit mistakes.
 8. Resist collaboration.
 9. Always work to existing norms and standards.
Never reveal what you don't know.
 10. Extend your control as widely as possible.
Dependencies create future income streams.
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www.usablebuildings.co.uk

Why do we need a new professionalism?

What has changed over the decades?

- The urgent need to reduce the environmental impact of existing and new buildings: *we must now find ways to do this quickly and reliably.*
 - Shortages of financial and material resources: *we can no longer afford to “invest” in the wrong things, but we can do things more carefully.*
 - Rapid technological, social and economic change: *we need to keep ahead of the game.*
 - **Increasing (often unnecessary) complication** of requirements, process and product: *we need to find what works well and do it better.*
 - **Outsourcing of technical and operational skills**, research and feedback by government: *we need to replace this lost practical expertise.*
 - **Excessive reliance on economics**, contracts and markets: *we need to go beyond the specification and the profit motive.*
 - **Virtualisation of education and practice**: *professionals need to confront the consequences of their actions, learn from them and share results.*
 - **30 years of professionalism being regarded as anti-competitive or elitist**: *but how else can those we trust also have the wider interests at heart?*
 - **Destruction of professional judgment by PR**, *reinforcing received wisdom.*
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New Professionals

follow design intent through into reality

- They understand what is needed *strategic briefing*
- Are clear what they want, and communicate it plainly *strategic design*
- Are ambitious, but realistic *question all assumptions, understand users*
- Follow things right through *e.g. using **Soft Landings** procedures*
- Review what they do *manage expectations, undertake reality checks*
- Make others aware of what they are after *specify: what, why and how*
- Check that things will work *technical feasibility, usability and manageability*
- Get things done well, with attention to detail *communicate, train, inspect*
- Finish them off *commission, operational readiness, handover, dialogue*
- Help the users to understand and take ownership *provide aftercare support*
- Review performance in use *including **post-occupancy evaluation***
- Work with occupiers to make things better *monitoring, review and fine tuning*
- Anticipate and spot unintended consequences *revenge effects*
- Learn from it all *and share their experiences*

THEY KEEP THINGS AS SIMPLE AS PRACTICABLE AND DO THEM BETTER
Only get complicated where you really need to.
