

The JCT Povey Lecture

Joining up the dots: How the construction industry should punch its weight

James Wates

11 October 2006

Introduction

On Wednesday 11 October 2006 the JCT Povey Lecture was given by James Wates, Deputy Chairman of the Wates Group and Chairman of the Construction Confederation and the Strategic Forum for Construction. His lecture, entitled, 'Joining up the dots: How the construction industry should punch its weight' was presented at the Franklin Theatre, Institute of Physics, 76 Portland Place, London.

The JCT Povey Lecture is an annual event at which an eminent person is invited to give his/her thoughts on significant matters that are relevant to the construction and property industry.

The JCT Povey Lecture was inaugurated in 2003 as a public acknowledgement and tribute to Philip Povey who served the Joint Contracts Tribunal for 50 years.

Biographical Details

Philip John Povey – **Barrister** – commenced in construction as a legal adviser to the NFBTE, now the Construction Confederation, in 1951. At the same time he began to assist the Joint Secretaries of the Joint Contracts Tribunal (the JCT).

Philip first became Director of Legal Services at the Confederation and then its Director General. He later became the first Secretary-General of the restructured Joint Contracts Tribunal Limited in 1998.

Philip's work for the JCT became well known through the publication of JCT Standard Forms of Contract, which in time found their way to many parts of the world. He had a keen mind, which steered him around what he viewed as the less important or parochial issues for which the industry seems to have a particular attraction and enabled him to get to the core of a problem and to resolve it. He was an extremely skilful draftsman who invariably managed to satisfy the demands of many disparate, often competing, bodies.

Although there were committees, working parties and individuals that provided valuable input, it was Philip who shouldered the burden of writing the text.

He retired from the JCT at the end of 1999 but died suddenly only 18 months later, in 2001.

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HOW THE CONSTRUCTION INDUSTRY
SHOULD PUNCH ITS WEIGHT

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James Wates
Deputy Chairman of the Wates Group
Chairman of the Construction Confederation
Chairman of the Strategic Forum for Construction

Introduction

It is tempting to use such occasions as this to make grand predictions about the future or perhaps to launch a big idea. I once heard a futurologist say that the trick to success in his industry was never to make a prediction that could be proved wrong – at least until the cheque had cleared the bank! There is no cheque tonight so I don't promise to avoid either predictions or big ideas. Even so, a degree of caution is required before going down such a path. In exercising that caution, I decided to step back to the dawn of the current millennium when many predictions were made about the world in the 21^{st} century and the future of construction. This proved both instructive and sometimes bemusing.

Some predictions

Here are some of the things that caught my eye:

- on 14 December 1999 "Weekly World News" produced the long lost "Bethlehem prophecies" predicting the end of the world in 2000 "one half of the world will vanish under water in the blinking of an eye". Well they were clearly wrong!
- remember the so-called millennium bug. Possibly the greatest scam of all time unless you are an IT consultant of course!
- the BBC predicted that the new Millennium Dome might stay empty until late 2004. This was hotly denounced by the Government but it is still empty in 2006;
- Sandra Vandermerwe, Imperial College, predicted that 21st century consumers
 would no longer seek individual products or services but would look for a total
 offering. This is now a reality. Multi function mobile phones, insurance
 companies offering repair and maintenance, television used to access the internet,
 personal shoppers, lifestyle gurus and superstores stocking everything from bread
 to furniture;
- similarly IT consultants predicted the growth of internet shopping; and
- aviation enthusiasts predicted that a new type of airliner with a double-deck format, innovative layout and 800 person capacity would make its first flight. It has happened the Airbus A380.

Not all the soothsayers were wrong, even if theirs is not a precise science. Perhaps then I should throw caution to the wind.

Whither construction?

Focussing on construction, I came across two things. The Construction Confederation's 2010 Taskforce Report predicting the shape of the industry in 2010 and a Building magazine article entitled "21st Century vox".

Key themes in the Construction Confederation report were:

- the urgent need to attract the best people into our industry;
- the increasing significance and sophistication of IT;
- the importance of environmental issues;
- evolving relationships with clients; and
- standardisation of processes and components.

I will return to some of these themes later.

As you might expect, "Building" magazine was more eclectic. Opinions ranged widely and wildly:

- "we are going to see more pre-fabrication";
- "recycled building materials is just a fad";
- "architecture of the future will be one that addresses the world's ecological crisis"
- "construction will be dominated by a handful of global players none of whom are British"
- "IT will encourage a shift away from designers having full responsibility towards trade specialists taking on the role to provide greater surety on time, cost and quality";
- "thanks to nano technology we will be growing buildings from molecules up"; and
- my all time favourite: "The city of the future will no longer be physical. Imagination will usurp reality. Computers will respond to voice, touch and thought. As soon as someone invents realistic holographic people, a city will become a pop-down menu taken from the whole world. I can imagine a virtual me going with my virtual friends to a virtual Eiffel Tower without ever leaving my (mostly virtual) house."

There may be some substance abuse involved here!

Surprises and omissions

As far as I recall nobody asked my opinion in 2000. Also hindsight is a wonderful thing. But there seem to me to be one or two surprises and omissions.

Who could have possibly predicted that the English cricket team could win back "the Ashes in 2005" and that we would be hosting the Olympic Games here in London in 2012? Or that the world would become a much darker place following the World Trade Centre collapse and the rise of Middle East conflicts and terrorism?

Focussing on the world of construction, no-one predicted a change in Government attitude towards investment in the built environment. In the 1990s the politicians were judged successful if they reduced public spending and cut taxes. Now we judge them on delivery of new schools, hospitals, houses and roads. Whilst they have not always delivered, the change in attitude is profound.

No-one foresaw the extent to which our manufacturing base – Blue Circle, RMC, Aggregate Industries, Pilkington, Tarmac, Hepworth and Instock – would be taken over by overseas players.

Nor did our soothsayers identify the increasing pressure from society demanding better health and safety performance. Or that we would be so dependent on Eastern European craft skills to sustain our industry.

The issue of "sustainability", that seems set to become the main framework in which business will have to operate, was also surprisingly omitted. Global warming and the environmental agenda was rightly picked up but sustainability is not just about environmental performance.

Following a decade of slow but sustained growth one unanswered question remains – how do contractors become more profitable? Average margins of 2% could be deemed by many to be unsustainable, especially for plcs competing with the rest of the economy for finite amounts of capital.

The disappointments

Looking back over the past 6 years, there are also some disappointments at the pace of change.

We have not yet integrated our supply chains. A constant message from the manufacturers and the specialist contractors is how they could have helped deliver so much better value if only they had had an input into the design at an early stage and help value engineer the solution.

We continue to struggle in attracting the best people. We have done some superb work in selling our industry to students in schools and colleges but we continue to stumble (with the honourable exception of Scotland) at first post when it comes to

offering training placements, especially at craft level.

The potential of IT in transforming our businesses is not yet fulfilled. One frightening statistic is the number of SMEs suggesting they will have difficulty operating the new construction industry tax scheme because they do not yet have access to the internet. A recent survey in "Professional Builder" suggested over 40% of respondents did not use the internet for business.

In the public sector we have also struggled to exploit economies of scale through standardisation of both processes and components. Indeed, it feels as if we are swimming against the tide with Government policy flowing in the opposite direction through devolution of decision making to local communities.

I would not seek to argue with the principle of this but if we leave (as we have done) inexperienced local decision makers to reinvent a plethora of wheels we will continue to find ourselves heading backwards.

An MCG survey last year of 57 PFI projects showed that average delays, against published schedules, averaged 8 months and that the extra procurement costs associated with these delays were £1.21 million per project (some 1.6% of project values). This survey is just the tip of the ice berg.

It is just worth remembering here what the JCT – sponsors of this lecture – have brought to the party in the standardisation of construction contracts and practice notes. And how this excellent work can be undermined by unnecessary bespoking of contracts and the proliferation of too many competing contracts and forms.

Slicker procurement by government could save billions and this does not mean services procured, as happens all to often, on the basis of lowest price.

And the need to do our utmost to minimise "risk" in our industry continues to be massively misunderstood. Surprisingly nobody predicted an improvement in "on time" or "within budget" delivery. The disappointment is that no one foresaw that the new Wembley Stadium would not host the 2004 FA Cup Final or the 2005 final. Or the 2006 final, come to that.

And there is an even more fundamental problem for construction that appears to have escaped the soothsayers. That is, for an industry that contributes some 8% of GDP, we do not punch our full weight.

Building's "Vox 21st Century" illustrates the problem very nicely – architects predict the renaissance of good design, specialist contractors believe their power and influence in the supply chain is set to increase and global players believe they will be the only show in town. Nobody predicts we will all start working together in integrated teams, and as a whole industry, that we can make 2+2=5.

Punching our weight – a paradox

It is not hard to see the underlying problem of why we do not punch our full weight. Latest DTI figures show that there are 177,000 firms working within the construction

industry. 164,000 of these have fewer than 13 employees; 71,000 are sole traders; and only 60 companies have 1,200 or more employees. As an industry we are extremely fragmented.

In construction, I believe there has been a further development over recent years which has exacerbated the problem – that of polarisation. We have seen many medium size, regional players either exit the marketplace or be swallowed up by the major players. Leaving us with a group of relatively powerful lead players supported largely by a weaker SME sector. DTI figures show the overall number of players in the industry has dropped by 10% since 1994 but the number of larger players has almost doubled.

No wonder that the industry has so far failed to eliminate all the cultural tensions that exist between the players. Judged at least by the column inches of the trade press, specialist contractors continue to see the major players as enemies of the good – citing as evidence common late payment practices and the unjustified withholding retentions. Smaller contractors also resent the majors for promoting framework agreements – especially in education, health and water – that sometimes disenfranchise them from local markets. And the major players sometimes despair at the SME sector's inability to embrace new technologies and improved methods of construction.

It is not hard to see why existing within the construction market place is sometimes seen to be about as comfortable as swimming in shark infested waters. Barriers to entry have been virtually non-existent. Cut price competitive tendering in the public sector and a blame and litigation culture continually threaten to disrupt at every level.

Nowhere is this fragmentation clearer than within our representative bodies. I recently commissioned a survey within Wates to attempt to map out the number of trade bodies active within the construction sector and their activities. We uncovered a whole cottage industry – over 300 organisations. It reminded me of that sketch in Monty Pythons "Life of Brian" referring to the "Judean People's Front"; the "People's Front of Judea" and the "Judean Popular Peoples Front". None of the members of these organisations knew to what they belonged or quite what they stood for. I would suggest the construction industry is not so very far away from this today.

To make matters worse, our construction minister changes at least once a year. So they have probably only just begun to work out who we all are and what we represent as they move on to another portfolio.

In contracting at least, we thought we were beginning to solve this problem in the mid 1990s with the foundation of the Construction Confederation, bringing together civil engineering contractors, builders and housebuilders. But even at that time we failed to persuade some important sectors of our industry to join with us – for example the Federation of Master Builders and some of the specialist trades. And in subsequent years, we have seen more specialists and the housebuilders break away.

Contractors have gone backwards not forwards. We have lost sight of the fact that we have more in common than divides us. And the results leaving me doubting whether we:

- have a clear plan to attract those best people into our industry;
- can persuade clients that consistent delivery and service provides value all round;
- can make a meaningful impact to improve the environment and reduce global warming;
- provide society with what it wants; and
- make a reasonable profit commensurate with the risks we undertake.

Okay so I have deliberately painted a pessimistic – you might even say cynical – picture. And I would be the first to admit that within this rather dark oil painting there are rays of light. Indeed, there is enough light to give me the confidence to say that it is simply not acceptable for the industry to muddle on in the same old way.

Despite the sharks, we can all swim stronger together and we are already beginning to prove it. I take as my evidence the strong drive towards improving health and safety performance. The whole industry has embraced this over the last 5 years. We have shown clearly that faced with a common threat and with a common purpose we can stimulate major change. We can punch our weight.

MCG companies recently announced a 35% reduction in injuries. In 2005, the Civil Engineering Contractors Association members recorded a 14% reduction in their accident incidence rate over the previous year. And the whole industry (especially driven by the MCG, Civil Engineering Contractors Association and National Contractors Federation) is moving towards employing a fully qualified workforce, with nearly two-thirds of the labour force having the appropriate CSCS card.

Until recently this had been an isolated example but we are beginning to see a few more.

For example the whole industry is now embracing the Considerate Constructors Scheme, established nearly 10 years ago to minimize the negative impact construction work inevitably makes on local communities. We are now registering under the scheme over 400 sites a month. In the past 12 months, the scheme has embraced construction sites with a contract value of over £23 billion (nearly a quarter of construction output) and is making a very real impact in creating a better public image of our industry.

MCG has recently begun to tackle occupational health risk in earnest. One early initiative is a commitment, from 1 January next year, only to use hand powered tools that have undergone independent testing to measure the hand-arm vibration health risks. The aim is that a consistent benchmark for performance will accelerate the development of power tools to reduce the risks placed on construction workers.

Most major suppliers and tool hire companies are participating in the exercise willingly and enthusiastically. But some are not. We can all deal with that by refusing to buy or hire their products. The benchmarking data is freely available to

everyone working in construction and is both user-friendly and dependable.

CECA launched last October a Health Management Toolkit that is supported by our trade union colleagues.

I hope the paradox is clear. When we stand together and punch our weight we can make a real difference. One senior industry executive recently described the changes in health and safety performance as the single biggest culture change in his working life-time, over 40 years in the industry. I would not disagree.

Why therefore are we not charging ahead putting this collective weight to good use elsewhere?

The Strategic Forum

Two reasons are that we have lacked both the will to stimulate change and a clear mechanism for doing so.

With limited management time and with heavy construction workloads we have tended to focus on getting the job in hand done rather than looking at the longer term.

And the lack of a mechanism comes back to this fundamental problem of fragmentation. The Strategic Forum (and Construction Industry Board before it) were designed to try and overcome this difficulty and so far have only been partially successful. The Construction industry Board did some fine things — notably implementation of the Latham report, the establishment of Considerate Constructors and the launch of the annual National Construction Week. But for the most part it was seen by the industry as a creature of government with an agenda not wholly relevant to its commercial needs.

The Strategic Forum – also established by Government – was also tarred with the same brush. It is all too easy to stand on the sidelines and snipe at such bodies and organisations. It has been a much harder task for the industry to seize the initiative and take ownership of them and their agenda.

But we are beginning to do this. We have taken ownership and are starting to transform the agenda into our own. We are focusing on fewer strategic issues and we are keeping the agenda wholly relevant to the industry's commercial needs.

The collective agenda

Health and Safety

Not surprisingly – and rightly so – health and safety will continue to dominate. This work is being led by John Spanswick who is a passionate advocate for improving health and safety. There are some projects which still need to be finished.

Top of the list is completing the task of qualifying our workforce. A major driver for doing this is the work we have been undertaking with Lord Hunt, Minister for Health and Safety, to engage all public sector clients to be more discerning about health and

safety performance in selecting contractors. The goal is that the public sector only works with contractors with a fully qualified workforce, clearly demonstrated through CSCS cards.

We need to continue to develop ways of engaging our workforce – sharing ideas that work well and learning from mistakes. That is why I am pleased that the trade union movement is an active participant in the Forum.

New technology is also creating opportunity, for example in greater use of prefabrication. We need to find ways of stimulating such change, ensuring that best practice is widely disseminated and understood.

And, of course, there is a need to see that the new CDM regulations are understood by the whole supply chain and properly implemented. There is a key role for the Forum in delivering consistent and clear guidance to the various parts of the supply chain.

For the longer term – and I speak of a three to five year time horizon – we have four clear strategic goals:

- to establish some indicators for measuring occupational health. There are some good lessons to be learned from the Constructing Better Health pilot project undertaken in Leicestershire over the past two years;
- to establish a single mechanism for recognizing competence. This is fast being achieved for individual employees but not at corporate level where there is a plethora of competing standards. If we want procurers of construction to be more discerning we need to provide the tools to help;
- to ensure that graduates coming into the industry are clear and knowledgeable about health and safety risks. It is nothing short of scandalous that health and safety is not a core compulsory module in all construction related degree courses; and
- last, but no means least, we also need to embrace more SMEs in the process. We have a task group actively engaged in this. One of their first products is a straightforward, no nonsense toolkit to help SMEs understand and measure their progress in truly respecting the people who work for them.

Sustainability

It is a brave man who seeks to introduce sustainability into any lecture because in defining what it means it is so easy to fall into a bear trap. It is even easier to focus solely on green issues, whilst forgetting the social and economic aspects and it is even easier to pass the buck.

I aim to avoid the traps by avoiding the definitions and diving into some practicalities.

Some 7 years ago, the Construction Confederation held two major conferences looking at how the construction industry might rise to the challenge of sustainability. Looking back at the papers now three things leap off the page.

The first was that, as an industry we were too heavily focused on environmental performance, important as that is.

Second, we were not taking a holistic approach. The work we were doing on health and safety, recruitment and training and on forging long term relationships with clients to provide a more stable economic platform for the industry was not part of the sustainability picture.

And it was easy to pass the buck – we could of course build more sustainable structures but the clients aren't demanding them because the investors won't finance them and the occupiers don't want them. This was termed "a vicious circle of blame".

How therefore can the Strategic Forum take the issue forward? I believe the key task is to acknowledge that we cannot solve world peace overnight but to agree a common pathway that helps to tackle the challenge in bite sized chunks.

A great deal of excellent work has already been undertaken by the sustainability task group, under the leadership of Ian Coull, especially in advising government on what is practicable for our industry. But we need to raise the profile of this issue and we need to keep it practical.

From a Wates' perspective we have already set ourselves a target to eliminate the need to send waste to landfill. That is also an aspiration of others but cannot be done without close collaboration with other parts of the supply chain. Designers need to specify more carefully to minimize waste, material suppliers can help by supplying materials in the most appropriate shapes and sizes and batches and contractors need to work with their supply chains to stimulate re-cycling.

The challenge for the Forum is finding ways of getting the whole supply chain behind such an initiative.

The construction industry's main asset is its people. In the long term our ability to attract the brightest and the best to join our industry is a key measure of our sustainability. CITB ConstructionSkills predict that by 2010 we need to attract some 245,000 more workers if we are going to meet expected demand.

The national press was full of stories during the summer silly season about the flood of economic migrants swamping the country from Eastern Europe with more on the way. The assertion, at least in the tabloid press, was that this was a bad thing because it took jobs away from UK workers. Well if it wasn't for these foreign workers – who in the main are well qualified and a credit to their home country's vocational training – I would suggest a number of construction projects would have been in trouble.

Even so, and despite the fact that construction has always had a mobile workforce, we must guard against over-dependence on foreign workers. A sudden construction boom elsewhere in Europe could see them vanish overnight. Our sustainability cannot be guaranteed therefore unless we raise our game in recruitment and training.

The Olympics provide an excellent opportunity for doing this. MCG members are

already committed to providing 1,000 job placements to youngsters enrolling on construction courses in FE colleges; 1,000 training placements to adults who do not qualify for apprenticeships and will be sponsoring 50 undergraduates on construction related degree courses.

Like the qualifying the workforce initiative this cannot be delivered without a collective commitment from the whole supply chain. The good news is that the client – the Olympics Delivery Authority – is an enthusiastic supporter.

Creating a profitable industry is also key to sustainability. I would contend that, despite nearly a decade of slow but sustained growth, we are only just beginning to scratch the surface in finding ways of delivering better value and increasing profitability.

Integration

A key to this must be better integration. Yet we have still to win hearts on minds on this issue. "Accelerating Change", the Strategic Forum's main product under John Egan's stewardship, set some clear targets. By the end of 2004, 20% of construction projects, by value, would be undertaken by integrated teams and supply chains. This would rise to 50% by the end of 2007. The 2007 target will not be met. And it is not easy to see why.

Is it that the business case for fully integrated teams and supply chains has yet to be made? I have seen figures suggesting that integration yields reduced operating costs, more predictability and greater profitability. Yet the industry at large remains unconvinced.

Is the issue more about changing culture and leadership? I certainly believe that there are still too few examples of fully integrated projects. Consequently, we lack convincing data to demonstrate the benefits to the industry and its clients.

I was intrigued the other day to read a report of a recent "Constructing Excellence" workshop on integration. Integration seemed to mean different things to different parts of the supply chain. Some saw it as selecting the right team. Others in early involvement. It could also mean a better understanding of the cost/value equation.

A first base task then is to try and get the whole supply chain to agree what we collectively mean by integration – perhaps two or three simple characteristics to get into projects.

An act of faith is required to break the mould. The Forum's 2012 Construction Commitments seeks to do that. Integration is one of 6 key principles enshrined in this road map towards delivering the 2012 Olympic Games in time, safely and to budget.

But a key challenge for the Forum is to drive the integration agenda much wider than simply the Olympics. Again plugging JCT – our sponsors – I should mention that the adoption of integrated teams will be given a boost when the JCT-Constructing Excellence Contract documentation is published at the end of this year.

A big idea

I said in my opening gambit that I might be tempted to launch a big idea. I have not set out to be original nor to add a new chapter to the history of rocket science. Even so, I want to draw the threads together.

I want to paint a picture in your mind of an industry that is truly acting as a single powerful player, maximising its 8% plus contribution to GDP.

In an ideal world I would say that we need to have a single, well resourced representative body to underpin our goals. Its activities would not just focus on fighting the industry's corner but also in facilitating a programme of business improvement.

However, we cannot reach Utopia over night. So my picture would be to see the industry bodies as the fleet – all sailing with purpose and in the same direction.

I see the umbrella bodies as the men of war, providing armoury and strength. I see some of the other players as the destroyers tackling barriers in particular market places. Our lobbyists are the mine sweepers helping us along the way.

I see some vessels out in front – MCG and CECA on health and safety. The Scots on recruitment and training and the material suppliers on research and development.

Dare I also say that I see individual companies skuppering some of the slower less effective vessels along the way.

I see the chairman of the Strategic Forum perhaps as the admiral of that fleet, working with some very able captains and ratings to keep the agenda practical and realistic.

The fleet is already at sea, we are beginning to set sail together. But we need to get to full steam ahead.

Some predictions of my own

I cannot resist concluding without some predictions of my own on where I hope to see the world of construction in 10 years time. My ideal world would look like this:

- as we look back to the first decade of the millennium our actions on health and safety will be seen as a turning point when the industry at last found the confidence to work together;
- the 2012 Construction Commitments are now being embraced by the whole industry;
- CITB has transformed from a government quango into "ConstructionSkills", responding slickly to the industry's commercial needs and so well supported by the industry that it is self funded and we can contemplate abolishing the levy;
- we shake off the fixation with employing mainly white, male, fully-able workers

and will finally recognise the vital breadth and depth that a diverse workforce brings to our industry;

- we are embracing rather than suffering technology, like the rest of British industry;
- nobody sends anything to landfill anymore. Indeed, the industry has taken over from Government and the drive towards sustainable development, moving it from being bolt-on to the heart of all UK construction activity;
- we have a clear plan, with measurable targets, for producing zero carbon buildings;
- we have created a league of super contractors and designers, supported by fully integrated supply chains, whose competitive advantage is that they always deliver on time, budget and to a perfect quality for every customer;
- we run a pan industry occupational health scheme; and
- we have lined-up beneath a single construction industry banner speaking with one strong voice, punching our full weight for the first time in the history of the industry.

Conclusion

Remember those Bethlehem prophecies suggesting the world was about to end? Perhaps they weren't so "whacky" after all.

The world did end as we know it.