

NOT JUST ABOUT BRICKS: THE INVISIBLE BUILDING WORKER

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The solution to the construction industry's 'image problem' is sometimes said to lie in explaining that building is 'not just about bricks'. This paper reflects upon the seeming 'invisibility', both in the industry and in academic work, of those who do the physical work of construction. Contractors increasingly delegate responsibilities for employment down multi-layered supply chains; training and development are largely confined to core professional/managerial staff. Building workers are increasingly marginalised in discourses which seek to constitute the construction industry as 'modern and high-tech', and the work as part of the 'knowledge economy'. With some notable exceptions, academic research tends to focus on professional and managerial staff rather than manual workers. Thus, arguably, research may fail to question fundamental assumptions, and to investigate the full range of people's experience in the construction industry. The embodied skills of craft workers are devalued by comparison with the more cerebral knowledge of professionals. Thus, firms cut themselves off from their knowledge base, workers have less opportunity to advance, and the industry continues to have an 'image problem'. Construction management (CM) is founded on appropriating the knowledge of the craft worker, as what was previously craft knowledge becomes management knowledge. Professional institutions seek to dissociate CM from mere building. Institutions of higher education play a large part in this, controlling access by exams and tests. Academic work on CM also tends to legitimise the view of professional construction managers as experts with authority based on scientific knowledge.

Keywords: workers, operatives, HRM, research, knowledge, site management.

INTRODUCTION

'As you pass each new monumental building, [the tour guide] tells you: "The World Trade Centre was built by His Highness..." But this is a lie. The sheikh did not build this city. It was built by slaves. They are building it now. ... They are hidden in plain view. You see them everywhere, in dirt-caked blue uniforms, being shouted at by their superiors, like a chain gang – but you are trained not to look. It is like a mantra: the Sheikh built the city. The Sheikh built the city. Workers? What workers?' Hari, 2009²

UK construction remains labour intensive, the biggest employer of manual workers. Yet whilst carrying out research into craft skills, I was struck by the invisibility of construction workers in many discussions of skill and training. From official

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² There has been discussion recently about abuses of construction workers by employers in the United Arab Emirates. Hari (2009) describes how the enslaved construction workers are invisible to both the Emiratis and the British expatriates. This can be seen as a more extreme version of the invisibility of construction workers in the UK.

government reports to academic papers or articles in industry magazines, the emphasis seemed to be on the skills and training of managers and professionals, rather than of the manual workers who make up roughly 80% of the industry.

METHODS

The ongoing empirical work from which this reflection emerges is using unstructured interviews, archival research and critical discourse analysis (CDA) to study craft skills in the UK construction industry. Fieldwork has been carried out on two construction sites, one run by a top-10 contractor and one by a small regional firm, neither of which employs any operatives directly. So far, 28 in-depth interviews have been carried out, and CDA is being used to analyse reports, websites, archival material, and also interview transcripts and conversations. In addition to a standard literature review, a sample of papers was subjected to both discourse analysis and content analysis in order to discover the frequency with which manual workers were mentioned, and whether the operative's point of view was considered, or the worker regarded purely as a resource.

THE INVISIBLE BUILDING WORKER

In the 1960s, several reports were produced purely on building operatives and their work (BRS 1967; Thomas 1968; Phelps Brown 1968; CITB 1969). The basis of these reports was that 'Building, possibly more than any other industry, depends on the abilities, attitudes and adaptability of its workers' (BRS 1967). By contrast, in recent policy documents construction operatives seem to be increasingly invisible. For example, a report on 'Skills for productivity' (ConstructionSkills 2006) fails to mention craft skills at all, but concludes that the skills with the greatest impact on productivity are leadership, business management, people management, construction management, and design. Similarly Egan's latest report (ODPM 2004) concentrates on professional skills in design and management. Indeed, skills, and 'skill shortages' are ways of talking about work and 'the problem with people' which avoid referring to employees or workers specifically. In recent reports the possessors of 'skills' are somewhat shadowy. In the Respect for People report (2000), for example, the 'lifelong learning and career development' section says almost nothing about training, especially initial training for trades - apprenticeship is not mentioned once. References to a need for clearly-defined career pathways for graduates, to CPD, and to on-line learning, make it appear that this 'staff development' is indeed for 'staff' only.

Evidence from ethnographic fieldwork also suggests that building workers are increasingly marginalised in discourses which seek to constitute the construction industry as 'modern and high-tech'. From the field notes from a Keybuild site visit: 'Bill was stressing the high-tech aspects in the meeting – the slipforming; top-down construction of a sprinkler tank, siting of the two tower cranes ... He and Jamie are from Keybuild's 'major projects' arm, and keen to show how technologically advanced they are. Yet of the little visible work that was going on – one piling rig, an engineer and chainboy setting out, a pile being poured and a guy pushing a cage into it – the thing that struck me was that there was a labourer shovelling muck by hand, the entire 2-hours plus that we were there. He seemed to be invisible.'

In Building magazine's 'good employer guide 2007', Chrissie Chadney, HR director at Willmott Dixon, is quoted as saying:

'It used to be common for people to come up through the tools into construction management, but that's rare now. The members of our workforce nowadays almost all

have degrees and are members of the Chartered Institute of Building or the RICS.' Construction firms these days employ a better class of person, it seems. This points to the transformation of employment practices which helps to create the increasing invisibility of the manual worker in the discourse.

Construction work has long been characterised by insecure employment (Tressell, 1914/1965), but during the long post-war boom, relatively secure direct employment became fairly common, so that there was a longer-term relationship between employer and employee. However, since the 1980s most large UK construction firms have become 'hollowed-out organisations' which no longer build anything, but merely manage the process. The return on capital for a hollowed-out firm does not depend on productive efficiency (and thus partly on the skill of manual workers), but on supply-chain management and the manipulation of payments. The core workforce consists of professional and managerial staff ("us"). The peripheral (manual) workforce ("them") is, as described by Atkinson (1984), financially flexible in that rates of pay directly reflect supply and demand in the external labour market, and numerically flexible, allowing the firm to react to fluctuating workloads by buying in these notionally self-employed, casual and agency workers as needed. The engagement of manual workers at arm's length contributes to their invisibility. Labour is even more commodified in this pure market relationship than in the employment relationship; the emphasis on supply chains means that firms are concerned not with employment relations but with price relations. Labour as a resource is distanced from workers as human beings, enabling most of the moral and legal constraints which had grown up around the employment relationship to be dispensed with. The operative is unlikely to be treated as a person rather than a labour resource, or to be given any but the minimum training (Green *et al.* 2004; Dainty *et al.* 2007). The traditional division between two classes of employees, staff and operatives has been replaced by a division between (managerial) employees, and workers as commodities, 'bodies', or 'trowels'.¹

The emergence of human resource management (HRM) and its 'enlightened' policies as something which is done to managers rather than manual workers (Legge, 1995) fits neatly with this denial of responsibility for the supply chain, ignoring the actual site operatives who do the work. There seems a curious disconnect between the HRM initiatives and the realities of work on site. Greed (2000, p189) comments on: 'the strange contrast between the 'clean' image of management found in the literature and the harsh realities of labour relations, characterised by bullying, conflict, exploitation, poor conditions, and pressure ... the 'slave culture' of the building site [is seen] as the 'guilty secret' which professional men are hiding from women seeking to work in construction'.

The invisibility of the building worker in industry and policy discourses is also reflected in the academic discourse of those who study the construction industry. There are a few very notable exceptions to this. Ethnographic studies of construction workers' culture include Applebaum (1982; 1999); Sykes (1969); Reimer (1979) Rooke and Clark (2005) and Thiel (2005). Research into 'human' topics (HRM, culture, work-life balance, or women in construction) tends to focus on professional and managerial staff. It is almost as though academics tacitly collude in the idea that it is not 'realistic' to apply the 'soft' or enlightened HRM ideas to benighted manual workers. There are exceptions but they are fairly uncommon. Most of the work which

¹ 'Bodies' was how one site manager referred to agency labourers, and 'trowels' to labour-only bricklayers. Both expressions are commonplace.

does focus on operatives concerns craft skills and training; there is a rich seam of work here (e.g. Clarke 2005; Clarke and Winch 2004; Gann and Senker 1998). The other common topic of work which mentions operatives is motivation, usually treated from an instrumental viewpoint of how to get more work out of them, though again there are exceptions (Kappia *et al.* 2007; Davies and Duff 1994). Health and safety is another topic which clearly concerns operatives, but here too they are often strangely invisible, as in Lingard and Rawlinson (1998) where there is only one reference to tradesmen in a paper on health and safety management. Since 2002, when Murray *et al.* said of building craft-workers 'the UK construction research community has largely ignored this important group', there has been some interest. A special section of Personnel Review edited by Dainty, Grugulis and Langford (2007) focuses on the construction labour market and employment practices; papers on HRM policies, skill shortages, recruitment and selection processes, and labour productivity include consideration of operatives, and recognise that managers and operatives have different points of view. At the same time a volume edited by Dainty, Green and Bagilhole (2007), looks at 'people and culture in construction', including some pieces which consider manual workers.

CONSTRUCTION'S 'IMAGE PROBLEM'

'Construction's negative image' frequently recurs both in industry initiatives and in academic work, and is often said to adversely affect the industry's popularity as a career choice (Strategic Forum 2002). Dainty *et al.* (2005) found that the poor image of construction was cited as an underlying cause of 'the recruitment crisis within the industry' by most of those interviewed in construction SMEs. Construction has an image synonymous with high cost, low quality, chaotic working practices and poor health and safety (Ball 1988). The construction industry is seen as tedious, dirty, non-technical, non-professional, hazardous, cyclical, and associated with difficult working conditions (Reid 1995). There is a widely held perception that career opportunities are poor (Baldry 1997). This 'poor public image' is often linked with 'the public perception of construction as a male dominated industry' (Strategic Forum, 2002). For example, Clarke *et al.* (2005) report European initiatives 'to promote the image of the sector and the training and employment of women.'. The image of the sector is regularly listed as one of the barriers to the recruitment and integration of women. Male domination of the industry is presented in terms of its 'image', rather than in terms of its practices, such as discrimination and hostility to women (Dainty, 2006). With less than 1% of those in the skilled trades being female, it could be argued that 'the public perception of construction as a male dominated industry' is essentially correct. Gale and Davidson (2006: 11) report a career adviser's statement that if the reality of an occupation involves sex or race discrimination, she is ethically obliged to reflect this in her advice to young people. If the reality is undesirable, then creating a better image is unethical – and ultimately ineffective. If the reality is improved, then the image will follow.

Construction is 'not just about bricks'

Construction workers are six times as likely to be killed at work as the average worker, and often suffer from long-term health problems such as knee and back injuries (Jones *et al.* 2003). Working conditions are frequently poor, and 'facilities which are available to workers on site are typically appalling' (DETR 1998). Yet, according to the Strategic forum (2002, p29) construction's image as a dirty, low skilled, accident prone working environment that fails to respect its people 'is not

entirely deserved'. Thus 'there is a need to dispel the misconception that construction work is tedious, dirty, and non-professional' (Rameezdeen 2007: 83). Many reports conclude the need to 'improve the image of the sector and attract applicants with suitable skills' (NHTG 2005: 128); 'a high-tech image delivering improved social benefits will make the industry more attractive as a career for young people (Foresight 2001). ConstructionSkills' Positive Image campaign promotes construction as an exciting career option for young people, especially women and ethnic minorities 'discouraged by its out-dated "blokes, bums and bricks" image' (ConstructionSkills 2005); the campaign has 'an emphasis on bringing graduate-level recruits into the industry' and its adverts stress that construction is 'not just about bricks'. Sadly, the PositiveImage Bebo site run by 'ConstructionGirl 121' is full of boys asking forlornly 'Can u help me find an apprenticeship?' The image of construction is to be improved, it seems, not by changing the reality of the industry, but by convincing people that 'it's not all about bricks and mortar!' (bConstructive website). Construction is presented as consisting of professions offering nice, clean jobs where you won't scratch your nail varnish. The images are of glittering modern buildings, carefully made-up young women in hard hats, and people working at computers; mud and manual work are conspicuous by their absence. Modern, high-tech, construction work is interesting and demands intelligence, it is 'not just putting one brick on top of another'. 'The industry has openings for professional and graduate level entrants ... a need for more technically qualified employees ... changing building techniques demand greater science-based skills of its workforce.' (ConstructionSkills 2005). The projects described on the bConstructive website are all big new-build jobs – the Gherkin, Eden, the Scottish parliament. 'You could manage the next glittering job and make loadsamoney' is the message¹, not 'you could fix Mrs Jones' boiler and get a trade that will stand you in good stead'. Academic work too tends to stress big, shiny new jobs. Researchers seem to draw a certain status from studying T5 or the Olympics; there is much less emphasis on the 50% of the industry which consists of repair and maintenance – or the small firms who account for most of its employment.

The 'hairy-arsed' steelfixer or bricklayer is seen as everything 'we' want to dissociate ourselves from – rough, foul-mouthed, coarse and stupid, as well as backward in all senses. Building workers do 'dirty work' literally and metaphorically – but the industry wants to wash its hands of them. Murray *et al.* (2002) describe the stereotypical view of construction workers as characterised by 'images of dirt, unsafe working practices, macho and sexist behaviour and unsatisfactory workmanship standards'. The middle and upper classes have long looked down on 'dirty' building workers, as Tressell recounts. Yet building workers do not passively accept this view of themselves. The social stigma of 'dirty work' fosters development of a strong occupational culture and ideology 'we perform dirty work because we're tough, not because we have limited options'. Hayes (2002) describes the construction of a positive masculine site identity, based on skill but also on physical endurance and hardship. This is 'part of a broader, positive interpretation of the building process as being almost romantically anti-modern, traditionalist and crafts-orientated, and overtly masculine - set within a dominant discourse portraying it as "backwards" ' (Hayes 2002: 640).

COMPETING BODIES OF KNOWLEDGE

Manual and craft skills are devalued by comparison with purely intellectual, cognitive skills. This too is longstanding, but the division seems to have been exacerbated by

¹ 'Transform your city, your bank balance, and your future' as the Positive Image campaign has it.

structural and cultural changes in the 1980s and 1990s - the dramatic move from the 'old-fashioned' making of things to the 'modern' making of money, the attack on the construction of skilled identity through apprenticeships, and the weakening of traditional working class culture. (To some extent the invisibility of those who do the physical work of building is a reflection of the disappearance of 'the worker' and 'the working class' in wider discourse.) We are all supposed to aspire to being middle class, going to university, going to work 'dressed up', and coming home clean. This is part of the industry's 'image problem'; respect is not accorded to learning a trade. Construction workers with practical skills resist this devaluing of their knowledge, leading to competing bodies of knowledge based in experiential and classroom-taught modes of learning (Rooke and Seymour 2002; Rooke and Clark 2005).

According to Giddens (1991: 30), 'expert knowledge in pre-modern cultures tends to depend on procedures and symbolic forms that resist explicit codification' whereas modern expertise depends more on lengthy training. Construction crafts are still characterised by this tacit knowledge, but rules of thumb are everywhere under attack by modernity. We can distinguish between the 'practical knowledge' of the crafts, and the 'formal knowledge' on which the professions are founded. What distinguishes the professions is not the mere fact of specialised knowledge, but the definition of that knowledge as 'learned' - esoteric, complex and theoretical or abstract. The professions are identified with the formal knowledge developed and transmitted in universities (Freidson, 1986: 687). The modern professions' control of training and qualification is exercised by members who teach in institutions of higher education or administer the professional institutions. Teachers provide the basic training upon which the credentials of the practitioners depend and are the custodians of the accepted body of formal knowledge, while those who do research or scholarship refine and extend the body of knowledge and skill claimed by the profession. Those who teach and do research transform into formal knowledge what was formerly merely specialised practical knowledge of the sort that ordinary occupations claim (Freidson 1986: 689-690). However, in construction at least 75% of the content of accredited courses is defined by the professional institutions (Clarke and Herrmann 2007).

CONSTRUCTION MANAGEMENT AS A PROFESSION AND AN ACADEMIC DISCIPLINE

Construction management (CM) can be seen to be moving from a practical skill exercised by those from a craft background, to a profession with a body of formal knowledge taught in Universities and approved by the professional institutions. The birth of CM as an academic discipline in the early 1980s parallels the earlier birth of management studies, sharing its tendency to help constitute a particular reality without critically analysing it. The representation of management as a science which can be taught, rather than a tacit skill based on experience, is a political, value-laden process. It suggests that university-trained construction managers have access to a scientific body of knowledge for managing complex systems, superior to more intuitive methods. Academic CM research and teaching contributes to creating and legitimising a view of professional construction managers as impartial experts whose authority is founded upon scientific knowledge¹. Modernist myths of scientific expertise and the

¹ This is of course a one-sided view. The university can also give practicing and future construction managers the tools to analyse critically their own practice and their place in the industry, encouraging them to reflect on their own actions and assumptions.

inevitability of progress are used to undermine traditional ways of knowing based on craft skills. CM is founded on appropriating the knowledge of the craft worker.

Pulling up the ladder – the professionalisation of site management

The professionalisation of what was previously part of the knowledge of the craftsman can be seen as the continuation of a long process. The first part to be separated out into a profession was design, previously carried out by master masons. Sennett (2008:70) describes the building of Salisbury cathedral in the 13th century'.

There was no one single architect; the masons had no blueprints ... the gestures with which the building began evolved ... and were collectively managed over three generations. Each event in building practice became absorbed in the fabric of instructing and regulating the next generation.' The birth of the architect, and the practice of drawing up full details of buildings in advance, eroded craftsmen's autonomy. Industrialisation, urbanisation, and the growth of capitalism led to the replacement of independent master craftsmen by waged employees. Yet building crafts resisted being divided up or routinised, and retained a relatively high degree of autonomy, and management of the construction process on site was still largely reserved for those who progressed from the trades. Nevertheless, what was previously craft knowledge has been gradually codified and transferred, becoming management knowledge. This modernising tendency has accelerated in the past 25 years or so, with the structural changes described earlier (the hollowed-out, flexible firm) and the 'invention' of construction management as a profession.

A professionalisation strategy lays claim to a particular body of knowledge, seeking to control training and standards, and to have training programs established in universities. Occupational groups traditionally try to exclude others and monopolise scarce opportunities by defining criteria of eligibility such as gender. In modern industrial societies, however, this closure of opportunities to outsiders is more often achieved by tests and examinations which are (ostensibly at least) open to all. Weber saw the educational system as an especially effective instrument for controlling access and furthering the development of the 'professional expert'. 'If we hear from all sides demands for the introduction of regulated curricula culminating in specialised examinations, the reason behind this is, of course, not a suddenly awakened "thirst for education", but rather the desire to limit the supply of candidates for these positions and to monopolise them for the holders of educational patents' (Weber 1978: 1000).

Modern professions also increase their status, autonomy, influence and rewards by setting up professional institutions to control access, establishing codes of conduct, and making claims to altruism and public service, all of which can be seen in the metamorphosis of the Builders' Society into the CIOB. In spite of the CIOB having gained its Royal Charter in 1980, many do not regard 'builders' (construction managers) as professionals. CIOB members have therefore attempted to distance themselves from operative builders, as in the proposal to become 'Chartered Constructors' and drop 'Builders' from the title, because of its perceived association with those who do the manual work of building.

At around the same time in the 1980s as the formation of construction management as a profession, academic discipline, and procurement method, there was a determined attack on traditional apprenticeships, and NVQs were introduced. NVQs have been widely criticised for their lack of academic rigour and dilution of technical content and underpinning theoretical knowledge (Grugulis, 2002; Clarke and Winch, 2004). Grugulis (2002: 16) goes so far as to refer to NVQs as 'designed to eliminate

knowledge' in focusing only on the behaviour and actions exhibited in the current job to demonstrate narrow 'competence', in place of more broadly constituted skills and knowledge. This leads to a 'Taylorist separation of conception and execution'. This 'narrow and relatively untheoretical initial trade training can pose a considerable if not absolute obstacle to further promotion' (Clarke, 2005).

The construction process is now often managed by degree-trained construction managers without hands-on experience. Those construction firms that no longer employ skilled operatives no longer have a trade base from which to recruit their site managers. The work of site management has changed too, from managing employees to managing subcontractors, which may mean that craft and technical skills are less important, and financial skills more so. 'Building's being taken over by QSs' is often heard from craft-trained managers, who suggest that the modern site manager is 'just there to do the paperwork'. The traditional GF hired and fired, set wages, planned and allocated work, ordered materials, controlled output and quality. The site manager now has less control over these things, as decisions about subcontracting and buying are made by others. According to the traditionalists, the degree-qualified construction managers who supervise subcontract packages have no idea what is involved in the practicalities of the work. It is the workers themselves, and the subcontractors' own foremen, who actually organise the work. This recalls the two parallel systems described by Applebaum (1982). The 'modern' project management team sets forth what is supposed to happen, and afterwards records progress. Meanwhile, 'the workmen in the field are absorbed with the messy process of getting the work done'. Managers 'are barricaded behind a wall of paper defenses while the real world of construction is taking place behind their backs'. This 'real work' may determine the efficiency of the building process and the quality of the product, but it does not determine the return on investment of the hollowed-out firm, and therefore is not what is valued – to the bemusement of the old-style craft-trained site manager.

CONCLUSIONS

This paper has tried to show how changes in the industry's structure and employment practices - the fall in direct employment of operatives, the collapse of traditional apprenticeships, the rise of the 'hollowed out firm', and of the 'college-trained' site manager - are interwoven and mutually constituting with changes in the discourse - the increasing invisibility of manual workers, the lack of respect for craft skills, and the invention of construction management as a profession and an academic discipline. In conclusion, it is suggested that these changes have implications for construction firms, cutting themselves off from their base of experiential knowledge; for workers, increasingly denied the opportunity to advance to positions in site management; and for the industry, which continues to have an 'image problem' because of the lack of respect accorded to manual workers. The idea that in order to attract women and minorities to construction we have to explain that it is 'not about bricks', shows the continued assumption that work in the trades is the preserve of white men. The buildings and infrastructure society needs are not built by cost managers or document controllers, but by people with dirt under their fingernails and a bricklayer's cleavage. As long as the skills of building workers are devalued, then construction will continue to have an 'image problem', because the lack of respect accorded to the trades is reflected in appalling working conditions. The bigger construction firms aspire to Knowledge Management, yet seem to be cutting themselves off from a huge reservoir of practical, experiential and tacit knowledge. Building workers now rarely advance to positions in site management, as barriers between trades and professions become less

permeable than ever, strengthening class divisions at the very time that they have supposedly ceased to exist. It seems that construction management as an academic discipline has also largely ignored the operative, distancing itself from the 'muck and bullets'. The invisibility of manual workers in CM research raises questions about how research methods contribute to this exclusion, what is recognised as knowledge, who produces it, and where the researcher fits into these ways of producing knowledge.

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