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Dirty Construction Workers: Who You Looking at Buddy?

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Abstract
The public perception of the United Kingdom building (construction) industry and of the workers who are employed in it is often associated with negative stereotypical attitudes. Workers (and thus the industry) are characterised by images of dirt, unsafe working practices, macho and sexist behaviour and unsatisfactory workmanship standards. Such perceptions are known to have damaged the image of the construction industry and may have led to large sections of the construction workforce being stigmatised. This in turn is known to have persuaded many youngsters that a career in the construction trades (joiner, bricklayer, plumber etc) is not for them. However, very little empirical knowledge (other than a few notable studies conducted in the USA by the likes of Silver 1982, Riemer 1979, Applebaum 1981) can be found regarding the perceptions which the craft workforce have of their occupation role in society. This paper examines the perceptions which craft workers have of their occupational role. This work is discussed within the context of a current UK Government department (Department of Environment Transport & regions) initiative known as ‘Respect for People.’ This initiative seeks to encourage the construction industry to improve the health, safety and welfare facilities on projects and thus mitigate some of the ‘dirtiness ’attached to construction work life.

Introduction
The construction industry relies on a vast array of specialised building craftsmen / women to fabricate and assemble a multitude of building materials / components. The knowledge and skills used by these craftspeople has developed along with the innovations in the building industry. From mud to concrete, steel to plastic, and timber to resins. One might suggest that given the current agenda for sustainability, this situation might have turned 'full circle.' However, perceptions held by people today of these craft workers is, it is argued, much changed from yesteryear. The 'artisans' for example are no longer established pillars of the community (butcher, baker and candlestick maker) and it is unusual indeed to even hear of reference to such terminology. John Ruskin (1867) observed that it would "be part of my
scheme of physical education that every youth in the state - from the Kings' son downwards should learn to do something finely and thoroughly with his hand; so as to let him know what touch meant and what craftsmanship meant. Let him once learn to take a straight shaving off a plank, or draw a fine curve without faltering or lay a brick level in its mortar and he has learned a multitude of other matters which no lips of man could ever teach him". Nowadays, we are more likely to refer to 'cowboy' builders than to craftsmen.

The current desire for improvement in the construction process through 'drivers' such as the 'Rethinking Construction' (Egan, 1998) report and enacted through the Movement for Innovation (M4I) programme call for increased standardisation and prefabrication. This would tend to suggest a change in the process of fabricating / assembling / jointing building components, be they on site, or in factory conditions. Such change must surely lead to opportunities for evaluating the skills required of building craft workers. Indeed, given the shortage of school-leavers entering the construction industry, a significant increase in the use of automated building processes may be the preferred option. However, the need for traditional occupations (joiner, electrician, plumber, bricklayer etc) is unlikely disappear overnight, and as such we must find methods of marketing such occupations in an attractive manner.

The construction industry has itself made headway with this problem. The M4I 'Respect for People' initiative, through its Site Welfare Checklist for example, calls for clients / contractors to provide much improved welfare facilities on site, thereby reducing the 'dirtiness' of construction's image. Prior to this initiative, the more enlightened clients and contractors understood the importance of such issues. For example, the welfare facilities at the new SmithKline Beecham headquarters site were described as the 'A4 Hilton' (Contract Journal 1999b). However, these projects are the 'exception' rather than 'the rule'. A survey conducted by the Contract Journal (1999a) found that many of the contractors who attended the first 'Egan' conference were not providing workers with clothing, good toilet facilities or showers. On a lighter note, it can be seen that welfare facilities on site often have a dual purpose. The Cameron (1967) report of the inquiry into trade disputes on two London construction sites found that the canteen arrangements on one of the sites doubled as a licensed betting shop! The report concludes that such a facility appeared to provide an unnecessary attraction.

**Industry Image**

The UK construction industry has for many years suffered from an 'image' problem. Media depictions of construction in general and contractors in particular perpetuate the impression of an industry populated by small-time crooks and 'cowboys' out for 'a fast buck' (Building, 1998). Moreover, building workers all too often provide the clowns in the situation comedies on television (Centre for Strategic Studies in Construction, 1989). Baldry (1997) is however partly correct when he argues that such negative images are often a result of misinformation and mythology. However, it surely cannot be contested that such perceptions make it difficult to recruit skilled tradesmen / women. Sixteen year old school-leavers, traditionally the source of apprentices for the industry, generally view it as dangerous and dirty with limited prospects (CITB, 1998). Industry practitioners also express such views. James Armstrong, chairman of
Laing's construction arm suggests that the industry's recruitment problem is a result of poor continuity of employment, low investment in training, poor pay, poor health and safety, poor site conditions and low esteem (Contract Journal 2000a).

**Culture of Construction Workers**

Given the significant problems associated with perceptions of the construction industry, it might be expected that there is a substantial literature base concerning construction industry culture. Sadly, however, only a relatively small number of studies dealing with construction craft workers exist. Indeed as Silver (1982) observes, the organization of craft production and the quality of work for those in craft occupations are poorly understood. However, there are three significant textbooks which provide rich insights into the life of construction craft workers, albeit from an American perspective. Riemer (1979) a time served electrician and professional sociologist and Applebaum (1981) a construction project manager provide ethnographic accounts of construction workers on construction sites. Reimer explores deviant behaviour and discusses such issues as drinking, girl-watching, stealing and loafing, while Applebaum argues that the traditional work ethic is still strong in construction. He suggests that this is demonstrated by workers; getting to work on time; following instructions and orders; co-operating with other crafts; having pride in workmanship; being honest about ones work and being willing to perform difficult and dangerous jobs. Dr. Silver (1986) - a wallpaper hanger by trade - explores the concept of alienation in the building trades and relates this to wider construction issues such as local market conditions, employers' demands and trade union activity.

Additional literature contributing to this the body of knowledge includes Davis (1948) who interviewed 400 British operatives and detailed their views on their jobs, working conditions and home life. Participant observation has also been used by the likes of Feigelman (1974) who explored topics such as voyeurism (girl watching) among the various building trades. LeMasters (1975) also used this technique to examine the life of 'blue-collar aristocrats' (building workers). This piece of research differs from the other aforementioned studies as LeMasters assumed the role of a patron in a tavern frequented by construction workers. LeMasters visited the tavern frequently and spent time drinking and playing pool while mentally recording (conversations recorded on to paper after returning home from tavern) discussions on topics such as marriage, work, drinking and politics.

The use of pubs (drinking houses) as a meeting place for construction workers is of course well established. Leeson (1979) refers to inns and pubs as the 'craftsman's lighthouse' and discusses the use of such establishments by early trade societies in the 19th century. Just as they were then, inns and pubs continue to be used as informal labour exchanges where trades can get information on jobs going and the signage above the door reflecting which trade frequented the establishment –Bricklayers Arms. Leeson notes that the second purpose of these establishments was to feed and bed those artisans whom were ‘tramping’ (tramp or journeyman) in search of work. Frequenting such establishments naturally has implications for the industry. Gerber and Yacoubian (2001) cite a study undertaken by the US Department of Health and Human studies that revealed that in 1997 the US construction industry had a higher percentage of illicit alcohol and other drug users than any other occupational category.
In the UK, anecdotal evidence suggests that ecstasy, cannabis and cocaine are being used and sold on sites, with one report suggesting that site workers had been using the canteen microwave to heat up hashish before cutting for distribution (Building 2001c).

Social Stigma
The social stigma inherited by those employed in the building industry can be considered a result of both the industry image and the negative perceptions attributed to occupational prestige. This is not to say that construction does not have a proud history of builders, engineers and ‘navvies’ but that to be 'a builder' in the 21st century means coping with negative stereotypical perceptions of such work. Building (1998) for example asks 'Why TV never takes us seriously' (construction industry). It is perhaps ironic then that the BBC's children's cartoon character 'Bob the Builder' is used widely as a positive role model during both the 1999 and 2000 National Construction Week (Building 2000a). However, scathing criticism of builders such as Bob also emanates from within the construction industry. For example, Robin Holt of Bath University comments on top end suppliers in the construction as 'two blokes with a rottweiler and a white van!' (Construction News 2000a). Operatives themselves also express such views. Steel fixer, Eddy Duffy comments that the 'average building worker is right-wing, racist and sexist, moreover, the management don't like women on site either' (Construction News 1999b). One might suggest that such comments are only anecdotal. However, in 1995 the then Chartered Institute of Building President, Michael Romans, commented that UK construction actively encourages its 'sexist, racist and homophobic image' (New Builder 1995). To compound such accusations, Contract Journal (1998a) reports that discrimination in the industry is also evident through ‘ageism’. Bricklayers are said to be particularly affected, although it is recognised that formwork and shuttering specialists tend to have a big core of older and specialist workers. Such discrimination is naturally worrying, particularly given that recent DETR figures highlight an industry populated by an ageing workforce, and one which suffers from a dearth of women and ethnic minorities (Construction News 2000b).

Reference can also be made to constructions 'macho' culture and its associated behavioural traits, which do perhaps emphasise such 'toughness'. Threat of violent behaviour for example and actual physical violence, although rare, do occur within construction. Incitement for violence and criminal activities (theft and sabotage of completed work) have been recommended by so called 'militant' groups as a solution to late payment of wages to operatives (Contract Journal 1998b). Riemer (1979) also comments on a related aspect of site behaviour. That of 'wolf whistling' at women passing by building sites. He argues that operatives indulge in such behaviour because society expects them to, and therefore completes the circle in stigmatising their role in society. However, the Construction Industry Board (CIB) has outlawed such behaviour in the UK. Their 'Considerate Constructors Scheme' includes a code of conduct which limits amorous attentions to 'admiring glances' (Edinburgh Evening News 1997).
Occupational Stigma

LeMasters (1975) tavern research revealed that construction workers were ‘well’ satisfied with their position in American society. Riemer’s (1982) study concurs with this view when he suggests that tradesworkers are a distinctly proud class of workers who are well satisfied with their occupation. This is an interesting observation, particularly given Riemer's former life as an electrician. Rowings et al (1996) for example were surprised to find that, from a selected group of trades-people, electricians were in a low-pride category which also included plasterers. In addition this study found that less-educated respondents were more likely to be highly satisfied with construction work and are thus more likely to consider a career in construction. Rowing et al’s claim that this reinforces the image issue of the poorly educated dominating the construction craft-force.

Melvin (1979) provides a useful summary of several studies used to analyse occupational prestige and acknowledges the view expressed by Roe (1925) that social status is more dependent upon occupation than upon any other single factor. Melvin’s study included trade occupations (electrician, carpenter, and plumber) with results from the USA, England and Japan. The combination of different research results shows that the prestige ranking for these trades is that of electrician, carpenter plumber (USA); carpenter, plumber (England) with the Japan study only ranking carpenters, albeit relatively highly (most likely due to Japan's long history of wood carving). The concept of occupational prestige is particularly important given that Construction News (2000a) suggests that site workers in the future will perform jobs with a vastly higher status attached to them. However, such claims were also made in the late 1960’s in relation to the burgeoning use of prefabricated building components. The International Labour Office (1968) argued that construction workers employed within prefabrication plants, and thus experiencing both advanced technological change and increased welfare facilities (as compared to construction sites) would result in workers having a higher personal self-esteem and occupational status. Moreover, it was envisaged that such conditions would present a more favourable image of construction and have a correspondingly favourable effect on recruitment to the construction industry! This is of course pertinent given that Egan’s 1998 report calls for an increased use of standardised and prefabricated building components.

Construction craftwork is recognised as an occupation that involves workers being exposed to dangerous, dirty and noisy conditions. Riemer (1979) notes that during the 'rouging' phase of building projects workers become 'locked in' to a setting that is rough, dirty and noisy. Applebaum (1981) asks that such blue-collar workers be given recognition for all the dirty, heavy, smelly and uncomfortable jobs that many people would not do themselves. Ashforth and Kreiner (1999) argue that such recognition is in fact internalised by 'dirty workers' and that the stigma of dirty work fosters development of a strong occupational culture. Their review of research suggested that dirty workers do not tend to suffer from low occupational esteem. Appropriate to construction is the reference they make to occupational ideologies—'we perform dirty work because we're tough, not because we have limited options.' Indeed LeMasters (1975) also contributes to such a view by observing that craftworkers know they have done a ‘day’s work’ because their clothes and bodies (dirt and fatigue) testify to the fact. Moreover, he suggests that these ‘blue-collar’ aristocrats feel they are earning an ‘honest
living’ because they work with their hands. This ‘honourable’ perspective is also prevalent in Japan’s construction industry. Levy (1990) for example, examined the Japanese construction industry, from an American perspective, and refers to the promotional work undertaken by the Japanese federation of construction unions (Zenkensoren). This federation prints promotional literature (flyers) which is sent to the wives of carpenters telling them that their husbands are performing a noble and much needed trade. The purpose of such communications being to make the wives proud that their spouse is a carpenter. The contrast between Japan’s construction industry culture and the UK’s is further contrasted by Bennett et al (1987) when they refer to the discipline and regularity of site workforce behaviour. One would however question whether the practice of, pre-work, 8.00 am bending and stretching exercises for all site personnel would be accepted by the UK’s early morning ‘canteen culture’ operatives.

New Skills and Training
Two reports published recently suggest the need for new skills in construction. Hamer (1999) suggests that new career opportunities will emerge in computer programming and production, assembly and quality control. Additionally, on-site workers and those in pre-assembly factories will need both their traditional craft and new technological skills. The second round of the government's Foresight programme has also spawned a new report on construction. 'Building Our Future' (2000) recognises that new technology will require new skills for the site workforce. In addition it is envisaged that the use of site-robotics and off-site prefabrication will mean fewer people on site and a reduction in accidents.

Given that new skills will be required from the future construction workforce, it is disappointing that the current craft-workers are often seen as contributing little knowledge to the construction process. Lipton (2000) for example argues that clients rarely consult specialists such as bricklayers and carpenters and do not therefore benefit from their experience. He calls for a return to ‘traditional values, and to get craftsmen back on site’. However, even when craft-worker participation could benefit individual projects, it would appear that this is also ignored. Blackman (2000) notes that on several M41 ‘Demonstration Projects’ site workers were blissfully unaware that the workforce was involved in such an initiative. Blackman, a general secretary of the Transport and general Workers Union (TGWU) suggests that the casualisation of the workforce has led to this a lack of involvement and that such a culture must change if the M4I wish to improve the industry’s image.

Muck and Brass: To Earn a Day’s Crust!
Given that many teenagers have perceptions of craftwork being ‘low paid work’ it is perhaps necessary to briefly examine the role of the current and past economic climate. The boom to bust construction economy has much to answer for in encouraging such perceptions amongst teenagers. However, current skill shortages throughout the UK (and Ireland) have resulted in many trades being paid £100-150 per day or around £20 per hour (Building 2001a) Such rates are far in excess of the nationally agreed pay scales negotiated by construction craft unions. However, such a position is interesting given that construction union UCATT are reported to be considering abandoning discussions on hourly pay rates in favour of a minimum starting salary of £15 000 to £16 000 per year (Construction news 1999a). The offer of such salaries may indeed be encouraging to prospective apprentices (albeit at the end of their
apprenticeship) but the current weekly pay rates for 16 year old apprentices continue to offer no encouragement to enter the industry. For example, the chairman of the southern region of the Civil Engineering Contractors Association warns that most 16 year olds would be better off on benefits than accept the current £93.21 for a 39-hour week (Construction News 1999c). One must not however forget the recessionary climate and the havoc and destruction it brings to construction the construction labour force. Building (1993) reports that pay rates are dictated by the ‘brutal economics of the free market’ and notes that ‘cash in hand’ labour is common with rates as low as £2.50 per hour in 1993. Such pay rates are typically evident where foreign labour (Contract Journal 2000e reported that stonemasons from India are allegedly being paid 30p an hour to work on a temple in Wembley, London) has been recruited and thus compounds the problem which this industry has with ‘black economy' practices. Current attempts to outlaw such practices through a Government backed Construction Skills Certification Scheme (CSCS) are however being hampered by a low ‘take up’ from operatives since its 1995 launch. Two industry associations (Confederation of Construction Clients and the Major Contractors Group) have however called for a fully registered workforce and a single registration scheme no later than 2003 (Contract Journal 2000g). It should also not be forgotten that the high wages currently being paid out within construction industry tend to drive up tender prices and increase the likelihood of the UK government adopting inflationary measures to ‘cool’ an overheating economy. Building (2001b) for example comments that tender figures have risen by up to 30% in London over the past three years, and that this has been fuelled by an insufficient supply of skilled craftsperson.

Given that many operatives continue to stick with the industry through ‘bad times’, it is possible that a working culture of alienation exists within this sector of the industry. Thus, actions taken by operatives such as pilfering and ‘going slow’ may be accepted as a ‘workers right’ and can be considered as legitimate behaviour, and in some instances may even represent a fight for the ‘working man’. This could of course be considered comical given that in ‘good times’ such operatives pay is likely to far exceed many professional salaries. However, the point being made here is that, during recessionary periods, construction operatives may feel that they are exploited and have to work for low pay, (possibly the nationally agreed union negotiated rates) in what may also be an unhealthy and unsafe environment, as a means to ‘earn a crust’. Hence during ‘boom periods’ they may see nothing wrong with exploiting the demand for their services. Such behavioural traits, if in existence, could it is argued be contributory to constructions ‘macho culture’ and are afterall representative of a free market economy. Indeed, one UK stand up comedian (Harry Enfield) used the occupational role of a plasterer to demonstrate the ‘loadasmoney’ culture. Furthermore, Building (1999) reports that day rates for finishing trades in London had reached between £120-150 per day and that such trades could hold projects to ransom by demanding what they want.

The Research Problem
The purpose of this research can be considered a subset of the larger 'skill crisis' research agenda. It does not seek to assess or forecast the need for craft training requirements (see Agapiou et al 1995a, 1995b, Agapiou 1998, CIB 1998 for example) but will examine the
perceptions which building craft-workers have of their occupation role. The UK construction research community has largely ignored this important group of workers, although anecdotal evidence abounds in the weekly construction press.

**Aim**
The aim of the proposed research is to identify the issues which lead to perceptions of craft work being 'dirty.' This term is used in its wider sense and is not restricted to physical dirt only. The research will focus on the core building trades (joiner, bricklayer, plasterer, painter & decorator, plumber and electrician) and seek to investigate whether the 'mythology' which prevents the industry attracting school leavers is shared by these workers. The outcomes could be wholesale or cosmetic changes to work routine which make life easier and so create a virtuous circle of a new mythology.

**Methodology and Deliverables**
The methodology employed in the research will be that of a qualitative paradigm. The epistemological assumption adopted therefore views the researcher as part of what is observed and focuses on meaning rather than facts. It develops ideas through induction from data rather than hypothesis testing (Easterby-Smith et al 1991). It will essentially employ a phenomenological perspective which involves interviewing multiple individuals who have experienced a phenomenon (stigmatized role). It is intended to supplement this data (triangulation) by using two additional approaches. The researcher engaging in observational participation will collect case study data. This will essentially involve the researcher working on site(s) as a means to capture behaviour and assess a variety of perspectives on workforce life. It is also intended to record conversations among craftworkers while at rest. This is likely to take place during both ‘official / unofficial’ rest periods and may include after hours drinking sessions in ‘bars’. This approach has already been used successfully by LeMasters (1975) and also by Bresnen (1988) who found that ‘reliable’ data could be collected in this manner. In addition, focus group interviews will be conducted as a means to air the data collected. This stage of the research could be described as 'turning the mirror' on the interviewees.

The outcomes of the research will form a powerful narrative concerning the prospects for the construction trades. If the outcome is that the story from the trades does not match the anecdotal evidence then the story can be part of the revisionist view of the image of construction. If the anecdotally created image is confirmed then it tells the industry and its institutions what has to be done.

**Beneficiaries**
The beneficiaries from the proposed research can be considered on two levels. The first group would include organisations such as the CITB and the School Careers Service that have direct contact with schoolchildren. The second grouping that would benefit from such research includes a much wider spectrum. The M4I’s Respect for People and Change the Face of Construction working groups and Health &Safety Executive. Moreover, this research would complement the future research that has been recommended by the recently published Respect for People report (2000). The working group have informed both the Construction
Research and Innovation panel (CRISP) and the DETR’s Partners in Innovation (PII) scheme of their desire to see research bids awarded in this field (behavioural issues). More generally, the research would inform policy makers at the DETR and the Department of Education & Employment. Such policy considerations are important in realising the ‘Egan’ agenda and may shape important elements of the Egan programme such as the pace of standardisation etc

References
Building (1997a) Tea and Sympathy, Procurement Supplement, July, pp12-13
Building (1999) Loadsamoney is back as Plasterers’ Rates hit £120, 28 May, pp14
Building (2000a) Has he fixed it? 31 March pp20-21
Building (2000b) Glasgow Council and firms unite to avert skills crisis, 22 September, pp.15
Building (2001a) New drive to recruit young people, 5 January, pp.10
Building (2001b) London Tender Prices up 30% in Three Years, 26 January, pp18
Building (2001c) Cracking Down on Drugs, 29 June, pp25-26
CITB (1998) Children's Attitudes Towards the Construction Industry - A Research Study Among 11-16 Year Olds
Centre for Strategic studies in Construction (1989) Investing in Building 2001, University of Reading
Contract Journal (1999a) Raynsford: Change or Lose Out! 21 July, pp 1
Contract Journal (1999b) Staff Enthusiastic Over A4 Hilton, 3 November, pp 16-17
Contract Journal (2000a) Industry needs to attract new blood, 19 April, pp 4
Contract Journal (2000g) Why the Industry Needs a Registered Workforce, 13 December, pp 32
Construction News (1999a) Union in Call to end hourly rate, 4 February, pp 1
Construction News (1999b) Crusade to Instil a Level of Respect, 16 September, pp 23
Construction News (1999c) Incentives for New Blood, 9 November, pp 62
Construction News (2000a) Imagine There's No Site Labour, 7 January, pp 22-23
Construction News (2000b) Show Some Respect, 7 December, pp 12-13
Edinburgh Evening News (1997) Farewell to Bare Bums…and wolf whistles are out too!, 7 April, pp 3
Leeson, R.A (1979) Travelling Brothers: The six centuries road from craft fellowship to trade unionism, George Allen & Unwin Ltd, London
Lipton, S (2000) Listen to Contractors and Craftsmen Urges Lipton, In Building,
Movement for Innovation: www.m4i.org.uk
New Builder (1995) CIOB President Claims Industry 'Revels' in Sexist and racist Image, 23 June, pp. This Week's News