CONSTRUCTION SITE GRAFFITI: DISCOURSE ANALYSIS AS A WINDOW INTO CONSTRUCTION SITE CULTURE

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Graffiti has often been studied by the social sciences as an indicator and manifestation of culture. On construction sites two distinct types of graffiti can be found. Official graffiti, such as the marking of datums in spray paint by engineers, is commonplace, and broken window theory would suggest that this would influence the creation of unofficial graffiti. This paper examined graffiti, both official and unofficial, found on ten construction sites over £15m in value, located in North West England. The sites were toured, including the construction area and welfare provisions. Every graffiti located was recorded by both photograph and fieldnote. The data were then collated and sorted and a taxonomy made of the construction site graffiti. Discourse analysis was applied to the dataset, examining graffiti as a form of social interaction. The need for reference to the context of the graffiti also necessitated comparison of the findings with the contemporary academic understanding of construction site culture, articulated in the literature review. The construction site graffiti was found to be tribal on many levels; from football to subcontractor to trade. It was also celebratory of ownership and personal immortalization, intimating the autonomous nature of construction workers, and it was often vulgar, possibly a result of the dominant masculinity of the sites. Whilst this study only gives voice to those within the workforce who create graffiti, examination of this form of accretion data can still be used to provide insight into the culture. As part of a wider study, these findings will now be used in triangulation with both alternative data sources and alternative methods of analysis in order to create a holistic impression of construction site culture.

Keywords: culture, discourse analysis, graffiti, site.

INTRODUCTION

Research involving graffiti is mainly found within the journals of the social sciences. Since the graffiti 'renaissance' began on the east coast of America in the 1970s, social academic research has followed its growth and development as an indicator of the urban subculture (Snyder 2006; Dickinson 2008). In addition to this research, which examines graffiti within its own social contexts, the use of graffiti as an independent data source also began to grow. Graffiti has been used in a variety of research projects, including studies of urban geography (Eyre 1984), of institutional cultures (Klofas and Cutshall 1985; Wilson 2008) and of cultural reactions to critical events (Klingman and Shalev 2001). Graffiti has been called the 'example par excellence' of accretion data for unobtrusive research (Webb *et al*. 1966).

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Through these developments, graffiti has become recognized as a 'window' into culture, reflecting a collective conscience and shared beliefs about reality (Alonso 1998; University of British Columbia (UBC) 2005; Whiting and Koller 2007). This perspective is reinforced by the categorization of graffiti as a cultural symbol; Hofstedes' (2005) manifestations of culture, the visible practices of the society. Indeed, graffiti has been described as an expressive cultural artefact (Klofas and Cutshall 1985). It is this concept of graffiti as a manifestation of culture that this paper wishes to transport into the field of construction management research.

For the purposes of this particular study, the term 'graffiti' shall be used for both the singular and plural of the form, following common parlance. Graffiti will be defined as any inscriptions, made by any media and found on any surface within the construction site, that are not part of the final works This broad definition will dictate the need for a taxonomy of the graffiti to reveal the intricacies and composition of the data, before the application of discourse analysis (DA) (Whiting and Koller 2007) can provide insight as to the social and cultural roles, identities and contexts of the producers (Van Dijk 1997).

LITERATURE REVIEW

Whilst the existing body of research of graffiti does not examine the construction site specifically, when the studies are examined as a whole they harmonize as to their general taxonomical findings. Evidence of the self is strongly represented by both individual and group identifiers (Alonso 1998; UBC 2005; Wilson 2008); insults, humour and sexually related items are also common. It has also been found that 'graffiti breeds graffiti' (UBC 2005), in line with Broken Window Theory (Wilson and Keling 1982) and consequently in areas where graffiti begins, it is likely to continue.

It is therefore probable that these elements will also be prominent within the construction site environment, but before a more detailed examination can be made of construction site graffiti in terms of culture, a context and an understanding of the community concerned is required (Eyre 1984;Whiting and Koller 2007; Wilson 2008), to inform any interpretation.

The UK construction industry operates a project based structure, where disparate organizations come together on a project-by-project basis, with the potential for competing objectives and demands, not least the demands of the clients and their consulting teams, who frequently impose short timescales and tight budgets on the projects (Loosemore *et al.* 2003).

This pressure cascades down to the construction site itself; productivity and progress are king and speed is of the essence (HSE 2003; Rawlinson and Farrell 2008), and for a workforce paid on 'price' for its daily work output, productivity becomes paramount (Spanswick 2007). That the site workforce is 99% male has undoubtedly influenced the site culture (EOC 2006), with men defining self largely through their work (Cockburn 1991), thereby creating a 'macho' culture (Jordan *et al.* 2005). This workforce is also largely transient between the projects, with relatively high levels of self employment (Department for Business, Innovation and Skills 2007), and consisting of operatives who enjoy the independence and autonomy that construction work offers (Applebaum 1981). Whilst long working hours, dirty and manual labour and potentially high levels of harassment and discrimination have all been cited as negative aspects of construction site work (Jones 2005; Chan and Connolly 2006;

Gurjao 2006), this should be contrasted with the high levels of job satisfaction, pride and enjoyable work environment that the construction site has also been shown to provide (Eisenberg 1998; CWIT 2006).

The construction site can be described as a unique environment; different trades and operatives come together for a project's duration to 'compete' in terms of productivity and speed in what are arguably relatively harsh working conditions. As Wild (2005) said, "…that projects are completed is a profound tribute to those who do the work, both because and in spite of the situations within which they labour."

METHOD

In order to gather a comprehensive dataset of construction site graffiti, ten construction sites in the North West were visited. Chosen partly for convenience, the sites also fulfilled the criterion of size (value over £15m), as dictated by the wider study of which this paper forms a part. The sites and all associated welfare provisions were methodically toured by the lead researcher and every individual graffiti observed was photographed and the details recorded within fieldnotes. These fieldnotes and photographs were then used to create a database.

This database was then printed and sorted and shaped into a taxonomy (Wales and Brewer 1976; Klofas and Cutshall 1985; Alonso 1998), categories developing organically as the dataset was examined. Once the taxonomy was produced, two full categorization passes were made to ensure a comprehensive representation had been produced. An interpretation of any 'hieroglyphs' found was provided and summarization in terms of key statistical characteristics was also made.

Examination was then made utilizing DA. This study adopted a position of social constructionism (Burr 2003) to allow for the application of DA as established by Van Dijk (1997). This approach argues that by accomplishing discourse in social situations, people construct and display social and cultural roles. Discourse manifests, expresses, and, at the same time, shapes the properties of the social cultural situation (Van Dijk 1997; Tonkiss 2004). Criticism has been made that DA should not be used as a 'route to things beyond', such as attitudes or culture (Potter and Wetherell 1992). However, when placed within the context of the literature review and alongside the arguably positivistic taxonomy, the findings of the DA can only inform the social and cultural contexts of this particular dataset and its field of production (Goddard and Wierzbicka 1997). This triangulation will enhance the robustness and rigour of the overall study (Dainty 2008), enhanced by the ecological validity of the data.

Other approaches were examined; the application of critical discourse analysis (Fairclough and Wodak 1997) and applied discourse analysis (Gunnarsson 1997), but these were considered inappropriate for this database. The implementation of a strictly Foucaultian approach was also rejected due to conflict with the aim of this study (Danaher *et al.* 2000). However, the application of DA to this database was influenced by Foucault's own use of varied subjects as discourse, separate from grammar and logic (Gutting 1993), in addition to other precedents within DA research (Rodriguez and Clair 1999; Whiting and Koller 2007).

The method undertaken for the DA followed a hermeneutic approach (Parker 1999) with illustrative and representative samples extracted from the data for examination. Focus was placed on the structure and function of the discourse and the constructions and practices therein (Parker 1999; Antaki *et al.* 2002), with reference to content as appropriate.

FINDINGS

Taxonomy

Whilst graffiti is illegal in the United Kingdom (Home Office 2009), within the construction site environment there is no such ban; in fact it is employed in an official capacity as a medium to inform and instruct. With this in mind, the initial categorization in the taxonomy was to distinguish between the official and unofficial graffiti, with unofficial graffiti defined as that being produced outside the formal management information structure. From this starting point the taxonomy was produced, as illustrated in figure 1 below.
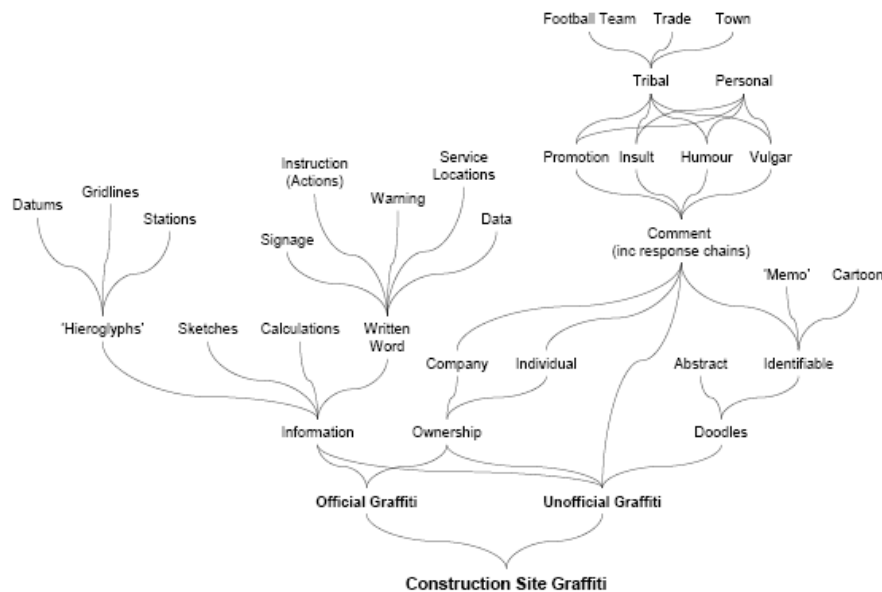

Figure 1: Taxonomy of Construction Site Graffiti

As shown, the output of the official graffiti was limited to the categories of information and ownership. There were no restrictions for the unofficial graffiti, which included both information and ownership outputs, as well as the other output categories of comments and doodles.

The majority of the all graffiti found on the sites was produced in direct relation to the construction work itself, under the classification of 'information'. This type of graffiti formed 79% of the total outputs, and within this classification 78% was official graffiti and 22% unofficial graffiti. Ownership was the second largest categorization, comprising 12% of the graffiti recorded. Within this category 6% was official graffiti and 94% unofficial. Only 9% of the graffiti recorded was outside of these two categories, in the classifications of comments and doodles, and all was unofficial.

No graffiti was located on what could be described as a finished surface within the construction works; all graffiti located within the site area were to be covered by a subsequent trade and finish. Graffiti found on and within the welfare facilities, containers, tool chests and other temporary fixtures of the site only formed 10% of the total outputs, and all of these were unofficial. The materials used to create the graffiti included marker pen, pencil, biro, chalk, sprayline. These are all readily available on the construction site, and there was no clear preference for their use in either official or unofficial graffiti.

Discourse Analysis

The taxonomy of the dataset has examined the general content of the construction site graffiti. To expand further on this, DA will now examine the way this content is utilized and expressed within the field in terms of structure and function.

Previous application of DA to graffiti as a data source by Whiting and Koller (2007) led them to the establishment of five discursive structural forms: zero response, utterance/response, chains, addition/insertion, substitution/deletion. They also established a protocol for the reproduction of the graffiti; each graffiti is distinguished by [] brackets, and alphabetical labels are assigned to allow identification of the order of occurrence of utterances. Actions such as deletions and additions are noted in () brackets and are simply researcher comments for clarification, over and above the original graffiti. Graphics and arrows, where they occur, are computer generated representations of those found within the actual graffiti. This paper will follow an examination of these structural forms and utilize this reproduction protocol, including the uncensored replication of language as originally produced.

The majority of the data did not elicit a response. The following data samples provide common examples of the zero response structural form:

Data Sample E-05

[a▽

CNK3]

Data Sample B-01

[aNWJ]

Data Sample D-08
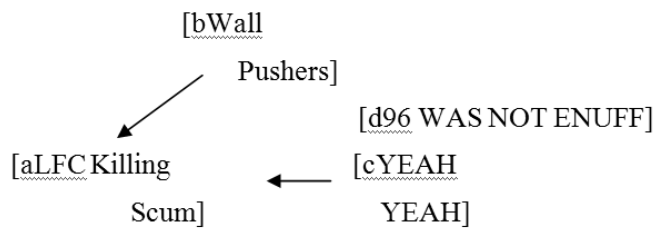
[aBIG

NEIL

IS

GAY   ]
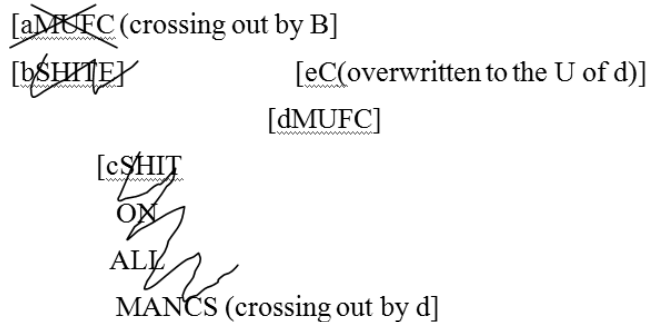
Data Sample F-06

[aBIG TREV

GIANT OF

A MAN]

However, the lack of response is likely due to the function of the discourse. Sample E-05 is directly related to construction works and sample B-01 illustrates ownership, discourses which do not request or require a response from others; they are statements of fact and made as such. The function of the other samples is somewhat different and could have resulted in response, although this is not directly encouraged within the discourses themselves. Here, the construct is arguably immortalizing (F-06), or immortalizing with a comedic approach (D-08), with their expression also giving voice to the creator. The arrow incorporated within sample D-08, written on the seat of a smoking bench, further illustrates the participatory nature of both subject and author in this particular discourse.

Several examples of utterance/response and of expansion into chains were located within the dataset, all initiated and maintained by unofficial graffiti.

Data Sample A-32

[bWall
Pushers]

[d96 WAS NOT ENUFF]

[aLFC Killing
Scum]

[cYEAH
YEAH]

Data Sample A-14

[aMUFC (crossing out by B]

[bSHITE]   [eC(overwritten to the U of d)]

[dMUFC]

[cSHIT
ON
ALL
MANCS (crossing out by d]

Within these participatory discourses, examples can be seen of the constructs of social conflict and social cohesion within the site environments. Response is not necessarily linear and different participants support or reject the ideology of others. Sample A-14 also illustrates the different levels of this social conflict, between the tribes of town and the sub-tribes of football team. The length of these discourses, and the number of contributions to them, would indicate that these group identities are reinforced by strong emotional investment from the participants. The function of these discourses is arguably to promote the participants' tribe, including reinforcement of their own membership within it, through the action of the discourse, whilst damaging rival tribes' standing within the site communities.

The sole example of addition/insertion was also located within the unofficial graffiti.

Data Sample F-10

[bMISS] [aMARPLE MAX'S BOX]

This sample shows a comedic addition to an ownership function discourse. The participation was not requested, however the addition has not been altered by [A] and has therefore been tolerated.

There were more examples of the substitution/deletion structural form, and again these occurred within the unofficial graffiti.

Data Sample F-04   *Data Sample F-09*

[a(bObliterated) [cTomo]   [cPaddy]

Robs CATS   [a(bObliterated)

AND   LOVES COCK

BUMS THEM]   AND ROCK]

Within the typical samples above, the original named protagonist within the discourse has been obliterated and a new protagonist substituted. The original function of the

discourses are likely to have been comedic/insulting and also immortalizing of the protagonists, and, following removal of the original identities, the original discourses have simply been reused by new authors to this end. That the obliteration only removed the protagonists' names implies that the remainder of the discourse does not cause significant offence; in fact the straightforward reuse implies a social familiarity with and acceptance of such comedic/insulting phrases. It is arguable that these discourses have contributed to the construction of a social environment where vulgar content is the accepted norm.

The images, or doodles, found within the database were in the majority abstract; that is, with no identifiable or recognizable structure. As an anonymous discourse, such doodles may be the product of idleness, fulfilling a function of mind (un)occupation. Where identifiable images were produced, these were all in 'cartoon' form and either comedic or vulgar, but still anonymous. However, the function of these discourses could either be to produce comment on the current situation, or again, to simply occupy the mind or hand.

DISCUSSION: THROUGH THE WINDOW

The taxonomy demonstrates the ready employment of graffiti as a tool for communication and discussion on construction sites, and this itself can be related to the transient nature of the entire construction process (Rawlinson and Farrell 2008). The constant mutability of construction sites is reinforced by this use of graffiti as part of the process; it is covered up by the following trade and so it can be made without recourse. This constructs a culture comfortable with constant change: in its immediate environment, its workload and its employment. However, it must also be noted that there was no damage to finished works, indicating a pride in the final outcome of the project for those involved in its creation (Eisenberg 1998).

The frequent use of graffiti to clarify the construction works also highlights the practicalities of the work environment (Chan and Connolly 2006); a large number of comments were made on steel in permanent pen, something possible in the wind and the rain, where a piece of paper and biro would prove rather useless.

The large amount of unofficial ownership graffiti constructs a culture where ownership of tools and equipment is important, as well as a source of proclaimed pride (Cockburn 1991). As these are essential for the operatives to work and, in many cases, to get paid (Spanswick 2007), this importance is understandable. This common discourse may also illustrate a competitiveness of the site environment and a practice of 'sharing' tools; the marking of a name on an object does not prevent theft, but it does show the ownership required in order to reclaim it. The very act of creating ownership discourse also serves to reinforce the sense of self within the work environment, and tangibly demonstrates the identity of the operatives concerned (Applebaum 1981). However, as well as individual ownership, trades are also identified by graffiti of the company name, a shared 'tribal' marking of their kit.

Tribal segregation is also identified with the local football teams: Manchester United Football Club (MUFC), Manchester City Football Club (MCFC) and Liverpool Football Club (LFC), and is frequently found within the graffiti. The tribal segregation of town is also prevalent and is broadly correlated to football team; however, the existence of MUFC and MCFC both within the city of Manchester creates a further tribal dimension against the Liverpudlians on the sites. The content of these tribal discourses is often vulgar and offensive; reference to historical disasters

for both MUFC (Munich 1958) and LFC (Hillsborough 1989) is made. However there has been no response made to this graffiti that would indicate that this was unexpected or indeed not tolerated within the site environment. These discourses arguably construct a culture with a high tolerance of vulgar and abusive statements; however, this may be a straightforward reflection of the composition of the site, the masculine workforce familiar with, and readily accepting of, such discourses (Jordan *et al.* 2005).

The vulgar discourses made of a personal nature also reinforce this construct, although they more often have a comedic approach. The individual is also immortalized through the unofficial comedic graffiti and site 'characters' can be identified; 'Big Neil' and 'Big Trev' are recorded within the discourses, almost as site legend or folklore, with an additional construct of light relief.

Comment must be made as to the lack of any vulgar discourse towards women in the graffiti. The only instance of any reference to women within the entire dataset was Sample F-10 ([Miss] Marple), which was a comedic discourse rather than a vulgar reference. All sexual and vulgar discourse within the data was made with reference to homosexuality or bestiality; however, a more detailed analysis and examination of this characteristic of content is arguably beyond the scope of this paper.

CONCLUSIONS

Whilst this study only gives voice to those within the workforce who create graffiti, it has in the majority reinforced the academic opinion of construction site culture made within the literature review, and can now be used to inform and reinforce the holistic examination of the site to be undertaken in future study. Through the complimentary approaches of taxonomy and discourse analysis, the graffiti data has been examined for both content and function, and the construction sites revealed as tough, independent and arguably not for the faint hearted. Although this is contrasted by the construct of the sites as being places of pride in work, with strong individual identities and emotional and entertaining banter. Construction site graffiti has not yet realized any notable artistic expression, which can be explained by the fact that, as one dryliner commented during the fieldwork, "…we've no budding Bankseys on here, have we!?"

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