

“Kilroy lives here”

An ethnographic exploration of construction site graffiti

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Abstract

This article explores graffiti made by construction workers and its associated practices at a major construction site in Sweden. Research on how construction workers use literacy by taking part in *literacy practices*, doings involving writing, reading, or talking about texts, is scarce. This research gap is evident with regard to their doings with graffiti, potentially making this workplace phenomenon difficult to teach and put into context in vocational education and training (VET). The theoretical framework applied is the practice-based *ecological view of literacy* which allows analysis of how literacy practices are shaped by *Discourses*, combinations of saying, doing, and being things. Using an ethnographic approach, construction site graffiti was documented using photography ($N = 92$) and fieldnotes (25,000 words) during five months of fieldwork at a major construction site in Sweden. Data was analysed in three steps including pre-analysis, deductive analysis, and inductive analysis using the concept of literacy practice as an analytical tool. Results indicate that graffiti in the form of construction markings, memory notes, sketches, ownership labels, calculations, comments, doodles, political symbols, tags, and caricatures was found at this construction site and that they supported practices of aiding construction, maintaining autonomy, and playful bantering. These findings suggest construction site graffiti to be a versatile tool used both for production and for fun enabled by a transient workplace that is difficult to control with traditional managerial techniques. Graffiti practices are believed to reflect a unique occupational culture that value displays of craftsmanship, opposition, and wit. As graffiti constitutes an aspect of workplace literacy that is unlikely to be put into context in construction worker training, future research on its potential in VET is suggested.

Keywords: construction worker, discourse, graffiti, literacy practice, vocational education and training (VET)

Introduction

New ways of working related to social and technological development have increased the significance of and brought substantial change to how *literacy practices* are embedded with much work in contemporary workplaces (cf. Farrell et al., 2020). Here, drawing on the framework of New literacy studies (NLS) literacy practices are understood as sets of socio-culturally recognized and supported doings involving reading, writing, and talking about *texts* situated in specific contexts (Barton, 2007; Gee, 2014; Heath & Street, 2008), for instance construction sites. The concept of text refers to combinations of different language modes like writing, imagery, and talk into meaningful entities recognized by their users as texts (Blåsjö, 2022), for instance drawings, documentation, and graffiti used at construction sites.

Although construction workers make up 4% of the EU workforce (Cedefop, 2023) their literacy practices remain mostly unexplored when compared to the literacy practices of academic trades (Karlsson, 2006). A notable exception is the contributions of Karlsson (2003, 2006, 2009) using ethnographic fieldwork to explore literacy practices related to planning, documentation and problem-solving at the construction site. However, more recently and beyond the scope of this study, oral communicative practices of construction sites have been examined using the concepts of multilingualism and language policy (e.g. Kraft, 2020; Söderlundh & Keevallik, 2022; Theodoropoulou, 2020). The lack of research regarding literacy practices might be explained by the fact that language use at the construction site is surrounded by stereotypes, like shouting at women passing by (Lennartsson, 2007; Lønsmann & Kraft, 2017; Reimer, 1979). It may also be that the physical, dirty, and manual work of construction workers, described by Thiel (2007, 2013) as archaic and somewhat resistant to changing work practices, is disassociated from reading and writing. Consequently, Schümchen and Lilja (2024) argue that texts used for construction work may lack institutional recognition and remain out of sight for their users. The scarce research regarding the literacy practices of construction workers can be problematic, possibly making literacy practices difficult to teach in vocational education and training (VET).

This study sets out to explore *graffiti* practices as one aspect of construction worker literacy. Graffiti can simultaneously be conceptualised as “unofficial or unauthorized, hence often illegal, writing or drawing in a public space – regardless of technique, style, or medium” and as “a set of specific cultural and stylistic conventions of imagery” (Kimvall, 2014, p. 18). Here, construction site graffiti is conceptualised with a working definition as: any inscription on construction site surfaces that is not officially intended for inscriptions, for instance materials, tools, and structural features of buildings. An underpinning of this study is that graffiti is a common feature of construction sites worldwide. This is both because they are used as graffiti canvases by actors external to the site (Farinloye et al., 2013) but, given the limited research on the subject, also by construction workers (Loosemore et al., 2010; Rawlinson & Farrell, 2010a, 2010b; Schümchen & Lilja, 2024). This was the case at the site explored in this paper where materials, construction elements, protective boards, signs, tools, furniture, and restroom walls functioned as canvases for a wide range of inscriptions. Graffiti may be of what is traditionally regarded as literacy, and some may struggle to see how it fits into contemporary workplaces. Nevertheless, I argue it to potentially provide important clues for understanding the nature of both construction work and construction workers. Except for a discourse analytic study by Rawlinson and Farrell (2010a, 2010b) at English construction sites and a social semiotic study at a Finnish site (Schümchen &

Lilja, 2024), graffiti practices have not been comprehensively researched. In order to advance the field of workplace literacies (cf. Karlsson, 2006) and provide new knowledge informing VET, this gap needs to be bridged by exploring construction site graffiti in the Swedish context.

The aim of this study is to explore graffiti practices at a major construction site in Sweden. In relation to this aim, the following research questions are being asked:

RQ1: What examples of graffiti may be found at the construction site?

RQ2: What kind of literacy practices can they support?

Theoretical framework

This study departs from the umbrella research paradigm NLS (Gee, 2020; Heath & Street, 2008; Street, 2017), more specifically the ecological view of literacy (Barton, 2007), and its associated concepts of literacy practice, *Discourse*, and *literacy event*. These concepts will be unpacked below as they unfold. The NLS is underpinned by the notion that reading and writing are complex systems enabled through the interplay of language, context, and identity, and is generally applied to examine how reading, writing, and talking around texts are embedded with and shaped by the practices associated with everyday life, workplace, and school. Rather than as sets of generic skills relating to reading, writing, and talking, the NLS views literacy as sets of socio-cultural practices centred around texts, in this case often multimodal graffiti artefacts combining the language modes of writing and imagery. This practice-based approach means that scholars generally pay closer attention to what is being done with texts rather than textual analysis (Gee, 2020; Heath & Street, 2008; Street, 2017). By doing something with texts I refer to using texts for supporting other purposeful activities like planning, documentation, or problem-solving (cf. Karlsson, 2009).

The ecological view of literacy highlights that literacy practices have a reciprocal relationship with the environment in which they are embedded. This means that literacy practices simultaneously are shaped by and an active co-creator of the environment, which predicts that construction workers read, write, and talk differently when compared to waiters, nursing assistants, or hairdressers. A practice can be defined as a “socially recognized and institutionally or culturally supported endeavour that usually involves sequencing or combining actions in certain specific ways” (Gee, 2014, p. 17). Gee (2014) compares practices to games centred around explicit and implicit sets of rules that may be followed or bent by players contesting for social goods. Following this metaphor, language acquisition is about learning how to play the game and to be recognised by a community of players (cf. Lave & Wenger, 1991; Tummons, 2023).

In the context of the construction site, the use of language might explicitly be guided by government regulations, quality standards, and safety protocols, but also to a large extent implicitly guided by Discourses. Discourses are implicit practical conditions that shape ways of being, doing, and thinking things in a specific discourse community (cf. Gee, 1989; Gee, 2014). The capitalisation is used by Gee (1989) to discriminate between Discourse as ways of being in the world and discourse as language-in-use. According to Gee (2014, p. 29) Discourses are “ways of combining and integrating language, actions, interactions, ways of thinking, believing, valuing, and using symbols, tools, and objects to enact a particular sort of socially recognizable identity”.

Discourses become salient in language and are thus inferable by studying how language, like graffiti, is used within a specific context. According to Blommaert (2018, p. 4) language can never be separated from context and must be viewed as a “socially loaded and assessed tool [...] to enable humans to perform as social beings”.

Hamilton (2000) suggests that literacy practices be analysed using the categories *activity*, *artefact*, *participant*, and *setting*. These are the visible features of *literacy events*, naturally occurring events involving the use of text (cf. Heath, 1983). The model was developed by Hamilton to infer literacy practices using photos, which makes sense in this study because the data contains no actual records of literacy events. Rather, because (some) graffiti was officially banned at the site, these literacy events had to be inferred using documented graffiti and verbal accounts. In line with Hamilton’s model graffiti practices can be understood as ways for participants to use graffiti artefacts for purposeful activities in different settings, a typical example from the data would be a carpenter using black marker to tag his presence on the plywood boards protecting the walls of the main elevator. The way this activity is performed provides clues to their underpinning Discourse. This is while the non-visible constituents of literacy practices, including knowledge, values, and understandings, are inferable by studying their manifestation in literacy events (Hamilton, 2000).

Previous research

Construction site graffiti practices have been explored to a limited degree within the field of construction management (Loosemore et al., 2010; Rawlinson & Farrell, 2010a, 2010b). Rawlinson and Farrell (2010a), conceptualising graffiti as a window into construction site culture, developed a taxonomy of construction site graffiti using graffiti documented by photography and fieldnotes at 10 English construction sites. They found that 79% of all documented graffiti was officially sanctioned information (hieroglyphs, sketches, calculations, and written word), 12% (both official and unofficial) expressed ownership, and 9% consisted of unofficial comments and doodles. The latter categories were examined by discourse analysis, illustrating an autonomous, masculine, and tribal culture where humorous and vulgar graffiti was used for celebrating or insulting colleagues. Drawing on the popular broken glass theory (cf. Wilson & Kelling, 1982) Rawlinson and Farrell (2010a) believed the presence of unofficial graffiti to be connected to the presence of official. Furthermore, they argued that graffiti reinforces the transient nature of the construction site. Loosemore et al. (2010), using questionnaires and ethnographic data to explore the concept of cultural diversity on Australian construction sites, concluded that graffiti was one of many ways to express racial harassment, with 57% of the 1155 construction workers reportedly having experienced racist graffiti. They reported that racist jokes were a mainstream site practice but argued that humour could also be used as a social glue to bridge cultural differences.

Similarly, communicative practices at the construction site have been explored to some extent within the field of sociolinguistics (Baxter & Wallace, 2009; Holmes & Woodhams, 2013; Karlsson, 2009; Schümchen & Lilja, 2024). Schümchen and Lilja (2024) departed from a geosemiotic framework and longitudinal ethnographic fieldwork to explore the role of multimodal textual artefacts in language practices at a large Finnish project. They described five types related to activities informing the placement of channels, documenting information about

tiling, highlighting damaged objects in need of replacement, discriminating trash from non-trash, and performing humorous social and interpersonal functions. Schümchen and Lilja (2024, p. 813) concluded that “textual objects play a crucial role in organizing the professional as well as social aspects of construction work” and argued that the textual objects became meaningful based on emplacement, timing, and the interplay between their lexical and graphical elements. Karlsson (2009) conducted ethnographic fieldwork at various Swedish workplaces to document the literacy practices of a carpenter, a duo of ground workers, a truck driver, a shop assistant, and a preschool teacher throughout one single workday. She found that reading and writing played a significant role in all explored trades and argued their main functions to be supporting orientation, documentation, problem solving, intermediation, education, and external communication. The carpenter and the ground workers used literacy to various degrees for planning, documentation and problem-solving. The carpenter, often working directly with the finished surfaces, rather passively followed the construction markings made by his supervisor. These markings reflected the supervisor’s interpretation of the construction drawings inscribed into the surface of the site. In contrast the ground workers, mainly working with later covered concrete surfaces, used sketching and calculation extensively and autonomously for solving problems in relation to the construction drawings. Following this, Karlsson argues that the position within a literacy practice can reflect the independence offered by workplace hierarchy. Baxter and Wallace (2009) used Wallace’s status as active construction worker to record the verbal interaction of English construction workers driving between sites, exploring whether a distinct builder’s discourse might be responsible for the industry’s male dominance. Using critical discourse analysis, they found that the workers, by creating narratives of out-groups (polish colleagues, cowboy-builders, and stiff upper-class clients), constructed an identity of being decent, honest, hard-working, and legitimate. Women were not regarded as threatening enough to be considered as an out-group. Holmes and Woodhams (2013) used arm-mounted recording devices to record interactions between construction workers. Their analysis using an interactional sociolinguistics approach showed that the ability to communicate like a construction worker is a key aspect of constructing a credible professional identity. This can be about understanding and responding to transactional instructions, but also to comprehend relational norms for small talk and humour, which are often blended in with each other. The use of technical jargon and verbal stenography separated newcomers and senior workers.

Further, construction worker culture has been explored within the fields of sociology (Reimer, 1979; Thiel, 2007, 2013) and anthropology (Applebaum, 1981). All these studies have in common that the researchers used their status as former construction workers to conduct ethnographic fieldwork at various construction sites, drawing on previous work experience. Two aspects of culture are particularly highlighted in all three accounts, the importance of informal humorous practices working as a social glue and the general autonomous nature of the trade. Applebaum (1981) views this culture as a product of the social and material conditions of the localized, unique, and transmutable construction site. Here, the unpredictability caused by weather, accidents, and mishaps and the changing constellations of often self-employed tradesmen feeds a strong culture of solidarity demonstrated by activities like dressing appropriately, owning the right kind of tools, using jargon, and joking. Reimer (1979) conceptualises occupational culture as a set of beliefs about the trade, including appropriate ways of working, behaving, dressing, and communicating that are products of the transitive nature of the construction site setting. He

argues the culture to be negotiated by social interaction and carried by established members of the construction site community. According to Reimer, one important aspect of social interaction is loafing, non-productive activities that diverge attention from the monotony, hardship, and dangers of work. Loafing is a practice much associated with large complex projects where personal responsibility is low, and includes interactional talk, taking unauthorized breaks, and humorously provoking colleagues by questioning the quality of their work. Thiel (2007, 2013), departing from the concepts of class and capital, also stresses the importance of such practices underpinning a masculine, physical, and body centred working-class culture. He relates them to the managerial culture of construction sites where work is orchestrated rather than controlled, meaning that practices involving “game-play, ‘having the crack’, ‘piss-taking’, time banditry, conflict with immediate naked authority, and real or theatrical bellicosity” are tolerated (Thiel, 2007, p. 241). According to Thiel this autonomy can be explained by the fact that construction, and the knowledge attached to it, is localized and heuristic in a way that reflects pre-industrial work patterns, making building work difficult to control by modern management techniques.

In sum, graffiti seems to be enabled by the transience of the construction site and is used both to support practices oriented towards the production of buildings and socially oriented practices of joking and bantering. The latter most likely reflects a well-documented autonomous and humorous construction worker culture.

Method

Data in this study were collected during ethnographic fieldwork at a major construction site in the south of Sweden. The data collection took place for 21 days distributed over 5 months in 2024. In total, the data that are analysed in this study consist of 92 photos that document 210 individual pieces of graffiti, and 25 000 words of (transcribed) fieldnotes. Pink et al. (2010) claim that ethnography is a powerful but under-used tool for qualitative exploration of construction practices. Fieldwork was carried out in the context of a larger explorative enquiry into various literacy practices of construction workers and staff at a major public building project in total involving over one hundred subcontractors and several hundred tradesmen and women. The project was contracted to Beta Construction, a major Swedish construction company and employer of the key participants in this study, construction workers Bernt, Glenn, and Martin, as well as supervisor Benny and manager Jonas. Note that all names of companies and individuals have been altered to protect their integrity.

An average field day would start during the construction worker’s coffee break at 9.00 followed by 2–3 hours of participant observations, conversations with the participant, and photographic documentation. During the observations I assumed an active field role by talking to the participants about their work, careers, training, and attitudes towards construction site graffiti, as well as occasionally assisting them by holding and carrying things or cleaning up. Although the data contains no records of graffiti being produced, the ethnographic approach allowed me to return to most settings to keep track of how graffiti unfolded throughout fieldwork and talking to people who had firsthand experience of graffiti practices. This proximity adds credibility to a study limited by the fact that making graffiti is a transgressive practice that is difficult to explore due to the anonymity of most participants and its transitivity.

Most graffiti were documented by photography using a cell phone camera. Three factors limited the selection of graffiti that could be photo documented. Firstly, permission to take photographs was not part of the initial access agreement and had to be negotiated with management some weeks into the fieldwork. Secondly, the fieldwork was conducted at the final stage of a two-year project, which limited the longitudinal scope because graffiti was covered or removed as the project progressed. Thirdly, I did not have access to the entire construction site, which meant that the documentation was limited to the entrance module, the worker's quarters, and the parts of the build that were accessible to me. This mainly excludes the staff's quarters and the finished parts of the building. However, I had access to three levels of the build and a potential selection of several thousand graffiti artefacts. Consequently, I limited selection to the parts of the fifth level where production was the most active as I documented graffiti at other settings. The chosen settings, the entrance, lunchrooms, restrooms, Bernt's hut, elevators, and parts of level 5, are described in a vignette below.

Some graffiti and conversations about graffiti practices were documented by fieldnotes. These were the products of the observations and conversations recorded by short, jotted notes gathered on foot. After typically rounding off observations at lunch time, an equal amount of the time was dedicated to transform the handwritten notes into ethnographic fieldnotes in accordance with the principles outlined by Emerson et al. (2011). This means using a high level of detail, native concepts and verbatim quotes for thickness, and clearly positioning the ethnographer within the researched context, acknowledging that fieldnotes are never naturalistic or objective, but rather representing the choices, interpretations, and sense-making of the researcher. Indeed, in the context of ethnography Blommaert (2018, p. 7) argues data to be “the whole process of gathering and moulding knowledge [...] knowledge construction is knowledge”.

Ethical considerations are key to the quality of ethnographic research (cf. Gorup, 2020; Hammersley, 2020; Heath & Street, 2008) and this study departs from the guidelines issued by The Swedish Research Council (Vetenskapsrådet, 2024). All participants were given oral and written information about the project before the fieldwork started and then later at different stages asked whether to be participants and signing written consent form. As documenting graffiti was not a part of the original design of the study this aspect of the consent was verbally renegotiated with the participants recruited early on. To avoid compromising the data I initially refrained from explicitly stating my interest in graffiti. Three steps were taken to address the potential ethical concerns of forcing consent, causing accidents, and causing harm by the publication. Firstly, because research in blue-collar workplaces often require access to be acquired top-down (Lønsmann & Kraft, 2017; Pink et al., 2010), in this case initially negotiated with the site manager, the consent of the participants was actively renegotiated throughout the process to minimize the risk of them feeling pressured to take part. Key to gain access to the workers was to win the trust of construction worker Bernt, whose vouching allowed me to recruit further participants. He was initially instructed by a supervisor to help me settle in and gradually expanded his participation by aiding both documentation and pre-analysis of some graffiti. Secondly, construction sites are often busy and noisy, making fieldwork challenging and potentially dangerous (Baxter & Wallace, 2009; Holmes & Woodhams, 2013). Accordingly, I was only allowed to access the site when guided by a chaperon and dressed in protective equipment, closely adhering to local safety protocol. Thirdly, I went to great lengths to preserve the integrity

of the site population by not reproducing graffiti portraying real people, as many caricatures apparently were. Consequently, figure 6c (also edited for readability) was chosen for this article only after thoroughly asking around whether the cartoon was generic or a portrait of an actual person. Another measure was to edit names in figures 2d and 8b to prevent identification.

Analysis

Data were analysed in three analytical steps, *pre-analysis* conducted together with participants, *deductive analysis* using Hamilton's (2000) conceptualisation of literacy practice, and *inductive analysis* using a thematic approach. Steps 2 and 3 were aided by NVivo. Firstly, pre-analysis began in the worker's lunchroom where individual artefacts were discussed on several occasions during the later stages of fieldwork. In addition, some tentative ideas were presented and discussed with some construction workers and managers during a concluding oral report given on the last day of fieldwork, adhering to the ethnographic practice of giving something back to the field. The report added to pre-analysis by being interactive, with the audience commenting and even disputing parts of the presentation. Both activities added ecological validity and informed the following analytical steps.

Secondly, all photos were sorted systematically by deductive coding. This was done using the NVivo function case classification by coding the photos using the variables artefact, participant, and setting (Hamilton, 2000). The deductive coding answered the first research question by classifying graffiti artefacts into categories such as construction markings, memory notes, sketches, ownership labels, calculations, comments, doodles, political symbols, tags, and caricatures. The categories sketches, calculations, comments, and doodles were directly retrieved from the taxonomy of Rawlinson and Farrell (2010a) as they matched the findings in this study. In addition, the categories construction markings, memory notes, ownership labels, political symbols, tags, and caricatures emerged as part of the analytical work. This work departed from terminology used both to describe construction site literacy practices (for instance Karlsson's (2009) reference to markings) as well as generic graffiti practices (cf. Pennycook, 2008).

Thirdly, all data was analysed inductively using a thematic analytic approach inspired by Braun & Clarke (2022). This meant coding the fieldnotes and photos using activity (Hamilton, 2000) as the guiding concept in order to develop and refine themes and subthemes. This process generated 3 main and 11 subordinate themes reflecting various practices as expressed in figure 1. Apart from qualifying themselves in the data, the main themes were also informed by previous research, where they each presented important themes regarding the activities of construction workers.

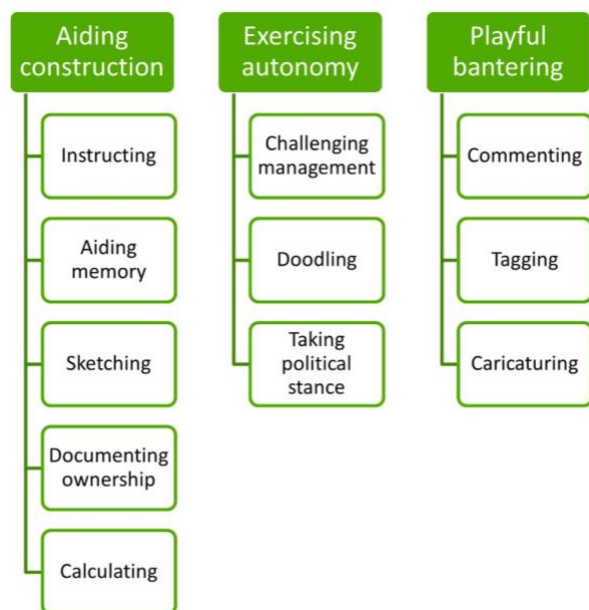


Figure 1: Thematic map of graffiti practices

The following results section is divided into four subsections. The first subsection consists of a fictional vignette illustrating the movements of a carpenter during the beginning of a typical workday. It intends to provide context to the findings reported in the following three sections, where the main themes aiding construction, expressing autonomy, and playful bantering are unpacked as literacy practices. This is done firstly by briefly presenting and contextualising examples of all subordinated practices and secondly, by an in-depth case chosen according to two criteria: their representativeness of the theme and the possibility of tracking them in the fieldnotes.

Results

Welcome to the construction site!

After entering the gates leading from the street to the site, the carpenter is funnelled towards the entrance of the quarters which consist of two long two-storied blocks of modular buildings connected by an entrance module. The entrance is a setting dominated by four large storage units for equipment. In addition to some doodles, many compartments are marked with graffiti artefacts showing names or initials. These were predominantly made by workers belonging to the main contractor Beta Construction, visual representations of the activity of documenting ownership. Several printed or handwritten notes and signs are posted to the shelves, walls, or noticeboards, some with added comments and sketches. To the left is the locked entrance to the staff's quarter, containing the offices of supervisor Benny and manager Jonas, and straight ahead is an exit that leads up to the building site. To the right is the always open entrance to the slightly worn-down worker's quarters where the carpenter, alongside colleagues Bernt, Glenn, and Martin (all participants in graffiti practices), dress for work and spend his breaks.

Upon entering the worker's quarters, the carpenter takes off his shoes and decides whether to enter the dressing rooms, the restrooms, or the lunchrooms. The dressing rooms, as well as most restrooms are clean and free of graffiti. However, one restroom close to a backdoor exit has a doodle, a calculation, and some political symbols written on the walls. The lunchrooms contain kitchenettes and school-cafeteria-like sets of tables and chairs. Places are personal, and each table has been assigned to different subcontractors. Most tables are cluttered with personal coffee mugs and cutlery, food containers, fruits, papers, calendars, and notes with taunting comments left by colleagues. The number of belongings roughly reflect the length of time the worker has been assigned to the project.

Upon exiting the quarters through the entrance module, the carpenter walks 100 meters towards the building site, being mindful of potentially deadly accidents caused by cranes and other machinery on the way. The entrance door leads up to a large open space, cluttered with materials, some containing sketches and comments, that must be stored inside or are enroute to be used. To the right is a plywood house resembling a garden shed, natively referred to as “Bernt's hut”. Mason Bernt does odd jobs at the site, demanding that he keeps his own tools and materials behind the pad-locked door. Tags are found on various surfaces and materials around the hut, especially on top of the workbench to the left of the door. Most striking are a series of caricatures, tags, and comments drawn around the door. Turning left past the hut, the carpenter turns right to access the main elevators. To protect the finished surface, the walls are clad with plywood or Masonite boards that are cluttered with various kinds of graffiti, including tags, comments, doodles, caricatures, and memory notes.

He arrives at level 5, where construction is mostly finished with some minor details still to be fixed. Tools and materials, most marked by handwritten or carved ownership labels, are spread around, indicating where production is still ongoing. All floors are covered by Masonite boards, on which a great number of construction markings are drawn, many of them by supervisor Benny. The workspaces of a reception desk and a kitchenette are covered by cardboard, which has been used for making sketches, calculations, memory notes, tags, and caricatures. Distributed along the level are several portable workstations used for reading drawings or making precision work, with most desktops containing memory notes, comments, and caricatures. Walking past a long hallway, the carpenter spots Glenn's wheelbarrow used for transporting tools and materials and his plywood template riddled with memory notes and tags.

Aiding construction

Figure 2 shows graffiti related to practices aiding construction, more specifically instructing (2a), aiding memory (2b), sketching (2c), documenting ownership (2d), and calculating (2e). Graffiti aiding construction is a salient feature of the site and is found in all documented settings, especially at level 5 where construction markings (2a) are plentiful. The transmutable state of the level 5 surfaces makes them ideal for inscriptions because they are ultimately due for painting, plastering, or scrapping. However, practices aiding construction have left traces all over the site. For instance, in the form of the memory note written in an elevator (2b), likely reflecting a passenger talking on the phone and simultaneously noting information. Other examples are the wiring diagram drawn on a plank found at Bernt's hut (2c), and the (poor) calculation of 26/23 made on a restroom wall (2e). All illustrate that practices relating to productive work can occur anywhere, both in social hotspots like the hut or the entrance where

construction workers meet up, and in spaces for private reflection like the restrooms. The ownership label (2d) shows that Bernt, like other construction workers permanently assigned to the site, has claimed a compartment for his shoes at the entrance. Bernt’s claim has been accompanied with an affectionate heart doodle, a common motif found in many elevators.

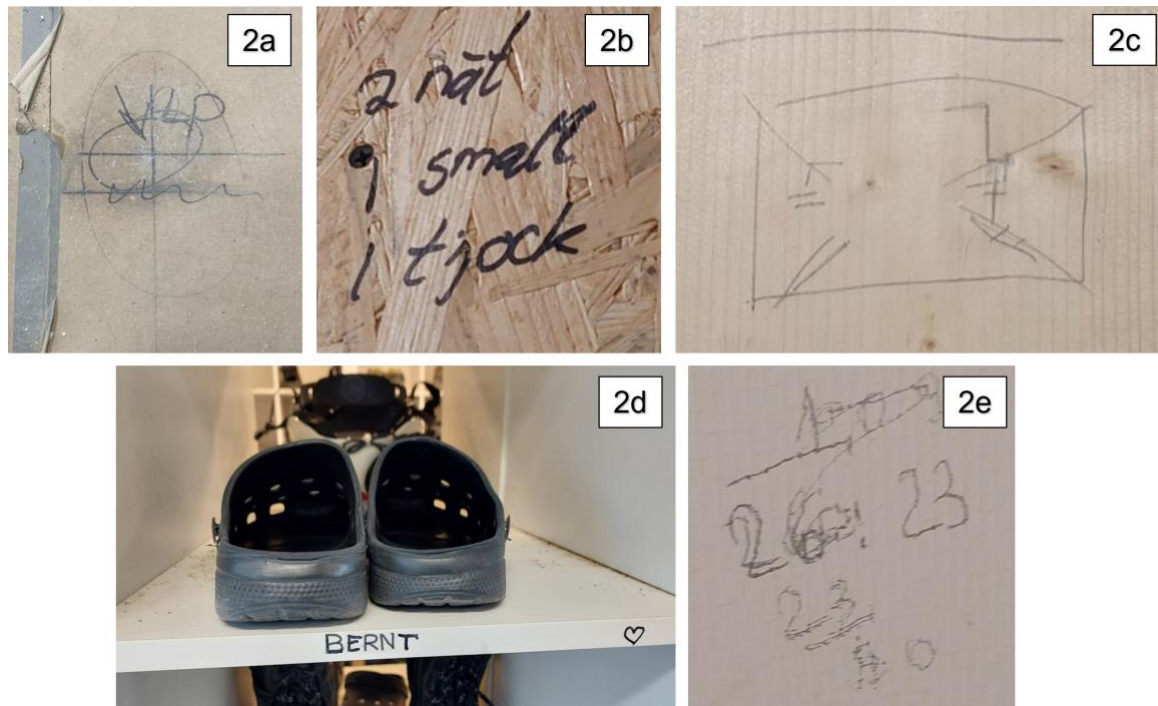


Figure 2: Graffiti aiding construction found at level 5 (2a), the elevators (2b), Bernt’s hut (2c), the entrance (2d), and one of the restrooms (2e). The memory note in 2b reads “2 nets/ 1 small/ 1 thick”.

Figure 3 depicts a construction marking made by supervisor Benny, drawn with marking cord and black marker on Masonite board covering the finished floor, illustrating the subordinate theme of instructing. It is one of many found at level 5 and typical of its kind. This case shows how the different trades working the site draw on shared Discourse and use language to construct buildings. The marking coordinates a series of hierarchically organized construction practices, involving at least five different professionals. First, the architect envisioned a design for the building and inscribed it into a ceiling drawing that, among other elements, specified the placement of a series of symmetrically aligned lights. Next, Benny interpreted the design and inscribed the placement of this light into the Masonite board with the marking. He did this by first drawing a centre line, which was used for marking the mid-point of a hole, and a border line showing the edge of the circular hole. The placement was intricate, because it had to be coordinated with the placement of other identical lights, as well as hidden joists and other fittings located or to be located above the ceiling. Benny then drew a circle around the mid-point, referring to conventionalized circular symbols for ceiling lights. As construction errors are costly, he added a written instruction to the right, indicating on which side of the border line the carpenter was supposed to cut through the ceiling. In this case, the placement of the marking directly underneath where the light was to be fitted is key to its interpretation. It would be possible, although time-consuming, to place it on the spot in the ceiling. It would also serve no

great purpose because the carpenter later used a laser tool standing on the floor to project the mid-point of the hole into the ceiling. Benny rounded off by writing an abbreviation for lamp, just to be sure that his colleagues get the message. Next, a carpenter used the marking to cut the hole in the ceiling, which consisted of three layers of plaster and plywood, before handing over to the electrician who wired and fitted the light. When all construction was completed, someone, most likely a professional cleaner, rounded off this chain of construction practices by removing and recycling the Masonite board.

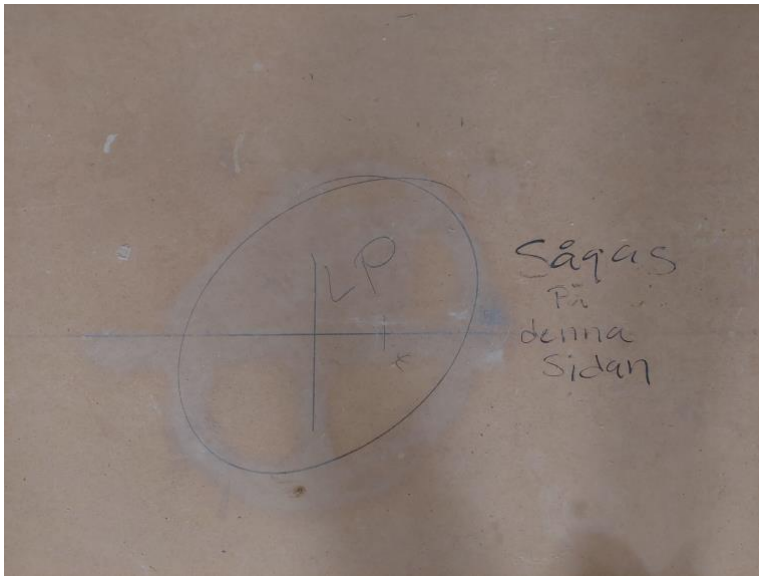


Figure 3: Instructing with a construction marking at Level 5. The instruction to the right reads “To be sawn On this Side”.

Expressing autonomy

Figure 4 shows graffiti related to the practice of expressing autonomy, more specifically challenging management (4a), doodling (4b), and taking political stance (4c). As will be unpacked below, challenging management is mainly associated with elevator graffiti, but the doodle, the drawing, and the sketch in 4a were made on a sign posted to one of the storage units at the entrance. Despite the sign urging the Polish workers not to leave their shoes on the floor, several shoes were scattered on the floor as this photo was taken. This can reflect it being written in a language spoken only by a minority, as suggested by the commenting question mark, but may also reflect an autonomous culture. Likewise, I argue making graffiti on an official sign, although partly related to productive practices as indicated by the sketch, can be seen as a way of exercising autonomy. Another aspect of this is to take a political stance, which is the case with the doodle and the negated political symbol found on a restroom wall (4c). The two inscriptions are likely corresponding, the initial one likely being the inverted, later negated swastika to the right (also found in one of the site elevators). As an activist response, someone blurred and crossed out the swastika before drawing a gloomy alien-like character to its left side. The alien’s proportions and form suggest the possibility of concealing an additional swastika. Finally, doodling is a practice visible in most settings, with the spray-painted abstract symbol (4b) written on the side of a storage unit at the entrance being the most visually striking.

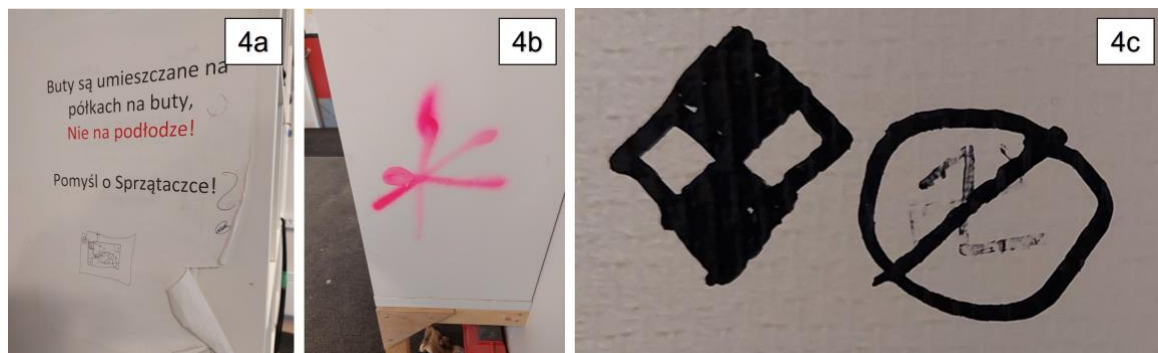


Figure 4: Graffiti expressing autonomy found at the entrance (4a-b) and in one of the restrooms (4c). The polish writings in 4a read “Shoes are to be placed on the shelves, not on the floor! Mind the cleaning lady!”.

The case related to figure 5 is not like the previous example of aiding construction related to one single inscription, but rather related to the provocative and offensive phenomenon of elevator graffiti, in this case drawn with pencils and markers on plywood boards. It highlights that construction worker Discourse can be about using language to express autonomy. Elevator graffiti is messy and multiple, aggregated by an anonymous crew of graffiti artists working the site and consequently moving between the stories using graffiti as a pastime and a way to stir up emotions at the site. When discussing elevator graffiti, many participants noted that it has the tendency to spread fast, which was also the case in the construction hoist used before the elevators were installed. A native metaphor compares graffiti to a “snowball” that grows once in motion, leaving a bad impression on visiting clients. This was mainly connected to graffiti that negatively criticised the main contractor Beta Construction with a sad emoji, made references to male genitalia and incest, or personally attacked colleagues. It was a case of the latter, according to manager Jonas, which led to controversies between an anonymous graffiti crew and management, during which management launched a campaign to ban elevator graffiti.

The campaign was initiated by management posting signs forbidding elevator graffiti. The unpleasant response was the vandalization of the signs using plaster knives. Next management issued an ultimatum to close the elevators. Because new graffiti was constantly added and the ultimatum proved to be costly to uphold in the long run, the next move was to order the graffiti to be overpainted. Unfortunately, this was done using white paint, unintentionally creating an ideal surface for new graffiti. It was not long before the walls were covered again. The last measure taken by management was to paint the elevators dark grey which ultimately proved to be effective. Bernt, self-reportedly informed about the politics of the site, believed this to be on account of the suspected artists being transferred to other projects. None of the participants reported taking part in elevator graffiti practices, and the subject was somewhat touchy. Lunchroom talk suggested this being the work of Polish colleagues working late afternoons. However, this prejudice could mostly be dismissed, because almost all identifiable written elements of elevator graffiti were in Swedish, and only a handful in Polish and Arabic.



Figure 5: Challenging management with various graffiti in one of the elevators.

Playful bantering

Figure 6 shows graffiti related to the practice of playful bantering, more specifically of commenting (6a), tagging (6b), and caricaturing (6c). There is evidence of playful bantering going on in all settings, especially in the elevators but also to a large extent at Bernt's hut and level 5, illustrating how important joking and playing are at the site. The commenting subtheme can be illustrated with the collaborative narrative (6a) found in one of the elevators. It suggests the telling of anecdotes, possibly mocking the practices of senior colleagues. Equally humorous is the generic caricature of a carpenter documented in one elevator (6c). The carpenter stands out as an elaborated piece when compared to most elevator graffiti that appear to be made in haste, reflecting the elevators almost always being crowded. Lunchroom talk suggested it to be the work of an “artistic” Polish colleague working late afternoons at the site, explaining the degree of elaboration. The “PERDOLA®” written on the helmet (interpretable as “patented idiot” in Polish) supports this claim. According to the workers, using the right kind of tools and dressing appropriately are important aspects of being recognized and accepted at the site. The artist underlined this significance by labelling the handsaw realistically with “Hulta” (short for Swedish tool manufacturer Hultafors) and the protective equipment playfully with “ABIBASZ”, “NIKE” and “JBE”, referencing streetwear rather than workwear. A reference to subcultural graffiti practices is salient in the elevator tag (6b) written in bubbly blockbuster-style letters. It indicates an artist familiar with throw-up graffiti and is found in various places, sometimes with the penis (or raised middle finger) crossed out. References to male genitalia and homosexuality are evident in many pieces of graffiti, possibly reflecting the workplace being dominated by men.



Figure 3: Graffiti used for playful bantering written in the elevators. 6a reads “When I was your age I could ride a bike with one leg./ NOWAY!/ When I was young I had no Legs but/ Your daddy carried me”.

Although Bernt and Glenn denounce elevator graffiti they are at the same time occupied by playing territorial tagging games (figure 7) across the site, practices that are if not appreciated, at least tolerated by management. This might be because they are funny, but it may also have to do with their association with Bernt, the respected nexus of fun and games. The game depicted in figure 7 was initiated by Martin and is basically about invading the territory of the other and leaving a mark. It is a display of how a shared Discourse can be used to make work more interesting. After finishing construction of the hut, Martin wrote “Bernt’s mech and bungle” and inspired by the twig holes drew a cartoon bird caricaturing Bernt on the door. The inscriptions simultaneously attributed ownership of the hut to him and mocked him for being a bird-like bungler. Next, Bernt was challenged by carpenter Mohamed commenting “Alfa Distribution off Mommi” (later crossing-out the ungrammatical “off”), suggesting that he exploited Bernt and the hut by borrowing materials there instead of using the company Alfa Distribution, which would be standard practice. These challenges led Bernt to reclaim the hut and take control of the games in two steps. Firstly, he concealed both mocking comments with a repurposed warning sign, both denying them and possibly warning others to issue further challenges. Secondly, he underpinned his ownership by paraphrasing a Second World War practice of tagging enemy territory (see also figure 8a-b) by writing and drawing “Kilroy lives here” over the entrance to the hut, then guarded by a life-size “Kilroy” and a stop-sign in addition to the padlock. The last entry made before the hut was disbanded and recycled was a note with a cartoon and Glenn’s catchphrase “STOP!!!” taped to the door. It could work as a comment to this game but points to another related game being played between Glenn and Bernt.



Figure 4: Tagging game at Bernt's hut. The writings on the note to the bottom right read "STOP!!!".

As Glenn is not associated with a physical place like Bernt (there are other tags made on Bernt's territory aside from those described above), he is instead challenged by graffiti being written on or placed in his personal tools kept at Level 5 (figure 8). This includes "Kilroys" thrown into his wheelbarrow (8a) or drawn on his prized plywood template (8b). The template also contains a mocking love letter in addition to Glenn's personal construction markings, memory notes, and calculations.

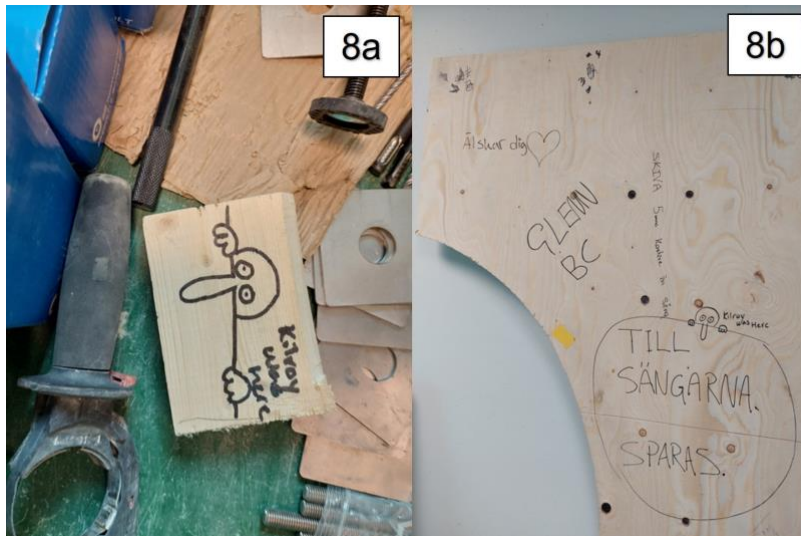


Figure 8: Graffiti left in or written on Glenn’s wheelbarrow and template at Level 5. The writings in 8b reads from top to bottom “Love you”, “BOARD 5mm Shorter than bed”, and “FOR THE BEDS/ TO BE SAVED”.

Discussion

In relation to RQ1, the examples of graffiti found at this construction site can be categorized as construction markings, memory notes, sketches, ownership labels, calculations, comments, doodles, political symbols, tags, and caricatures. This adds support to the taxonomy of construction site graffiti developed by Rawlinson and Farrell (2010a), as findings here overlap most of its categories. The only category of the taxonomy not found at this site was the tribal comments expressing belonging to football teams, trades, and towns. This may be circumstantial because tribality in relation to companies, trades, and nationalities is salient elsewhere in the data assembled in this project. The swastikas could be viewed as a kind of tribal graffiti, but I argue that they should be interpreted as means to provoke rather than to proclaim affection towards Nazism. Regardless of their underpinning, they demonstrate that graffiti interpretable as racist is not exclusively found in Australia (cf. Loosemore et al., 2010) but is also present in the Swedish context. However, it must be noted that no racist attitudes were documented during this project, although cultural differences regarding the safety practices of foreign colleagues was an important issue for some participants. In that sense they seem to have developed a practice similar to the English colleagues who according to Baxter and Wallace (2009) partly constructed their professional identity using Polish tradesmen as out-group. Furthermore, all categories of textual objects described by Schümchen and Lilja (2024) were found apart from construction markings outlining placement of channels. This may confirm their theory that it is temporally fixed to the early stages of construction because this study only documented the later stages of the project. If they were present at early stages of the build, they would have been both removed and concealed as I recorded graffiti at level 5. Schümchen and Lilja’s (2024) claim that textual objects are crucial for organizing both productive and social work, seems valid in the light of this study.

In relation to RQ2, at this construction site graffiti supports literacy practices of aiding construction, maintaining autonomy, and playful bantering. Graffiti practices aiding construction

seem to be underpinned by a Discourse of construction workers as skilled craftsmen able to use the materiality of their workplace to cooperatively develop and carry ideas of construction using graffiti. Unlike professionals in offices or schools, construction workers are allowed to make inscriptions on the surface of their workplace, which adds a dimension to their craft skills. This was salient in the analysis of the construction marking depicted in figure 3 informing a series of construction practices displaying the hierarchies of the site. Notable in this case was the role of the carpenter who basically followed the orders inscribed by Supervisor Benny and the electrician who had substantial agency when making the invisible wiring. This mirrors the cases described by Karlsson (2009) suggesting that the carpenter is firmly positioned below the architect and the supervisor by their role in the literacy practice. Like the ground workers in Karlsson's study, the electrician mostly works with later concealed parts of the building and is thus allowed more space for individual craftsmanship.

Similarly, Discourse allows construction workers to be autonomous and self-aware professionals who may use graffiti to pick fights and stir up emotions by making comments and doodles with political and sexual undertones. The position expressed by management and staff is to regard such practices as vandalism and time-banditry, effectively working as tool for bullying coworkers and embarrassing the company. Although the playful bantering between Martin, Mohammed, Bernt, and Glenn was tolerated, the open conflict surrounding elevator graffiti indicates that the managerial culture of indulging workers suggested by Thiel (2007, 2013) has some limitations. The deciding factor here seemed to be that graffiti became a work environmental issue demanding action. Furthermore, penis doodles as well as references to incest confirm that graffiti can reflect a vulgar working culture as noted by Rawlinson and Farrell (2010a, 2010b).

Further, acting according to Discourse can be to display and exercise humorous and playful bantering. Apart from writings and drawings on the hut, such practices have left traces all over the site in the form of comments, tags, and caricatures. Both Thiel (2013) and Reimer (1979) stresses such practices to be a way of coping with often physical, monotonous, and dangerous working conditions. Indeed, Reimer (1979) argues that practices that are non-productive and deviant can in fact be productive and in the interests of the employers. I argue that graffiti practices at this site perform such a function. At this major project speed and precision is king, leaving little room for individual craftsmanship and artistry. At the same time, its scale makes for a low level of social control, allowing displays of individuality and wit by writing graffiti on transmutable surfaces using the writing material at hand. Although likely contested by the managers of Beta Construction, I argue that graffiti practices may in fact be necessary to some degree for construction, making for a kind of discursive “work” that enables production by creating a culture of solidarity (cf. Applebaum, 1981). Taking part in them can also be viewed as a way of constructing a professional identity as construction worker, where the ability to communicate like one can be considered a key aspect (Holmes & Woodhams, 2013).

Conclusion

In sum, this exploration of graffiti at this major Swedish construction site suggest that graffiti is a versatile communicative tool enabling the coordination of both productive and non-productive doings enabled through the interplay of language, context, and identity. It seems to be

conditioned by the fact that construction sites are transient and difficult to control using traditional managerial strategies. These workplace conditions allow graffiti to be used for displays of craftsmanship, opposition, and wit, all important aspects of a unique occupational culture. The fact that findings at this site are comparable with previous findings at construction sites in Australia, England, Finland, and Sweden, suggest that construction site graffiti is an important global construction phenomenon that needs to be further addressed.

One important contribution of this study is that it illustrates that there are literacy practices going on at the workplace that are likely never to be put into context in VET. This is at least the case with the Swedish Building and Construction Programme where the curricula (e.g. Skolverket, 2011, 2022a, 2022b) make no direct references to graffiti practices. Consequently, future research should set out to explore the educational potential of graffiti in the training of future construction workers. Using graffiti could benefit students by offering a way for them to connect with the skills, norms, and values of their future trade. More generally, using graffiti in training would push the boundaries of what may be comprehended as VET in a way that might be provocative for its stakeholders by challenging their notion of productive work and educational practice. Nevertheless, such an initiative might provide crucial insights to inform a complex and holistic understanding of VET.

Author biography

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