# Using a Socio-Technical Approach to Explore Perceptions of the Graffiti Culture

Emma Love, Sharon Cox, Sandi Kirkham, Mohammad Mayouf

Birmingham City University, UK Emma.Love@bcu.ac.uk, Sharon.Cox@bcu.ac.uk, Sandi.Kirkham@bcu.ac.uk, Mohammad.Mayouf@bcu.ac.uk

**Abstract.** The effectiveness of socio-technical approaches, such as the Soft Systems Methodology (SSM), to structure problematic situations is dependent on the candid communication of participants. This paper reports a pilot study using SSM to explore the challenges of establishing the Ideal Speech Situation in order to gain an understanding of the contradictory perceptions of graffiti. Through exploring this social phenomenon from the views of both graffiti writers and the general public, power and ego were identified as challenges to establishing an Ideal Speech Situation. Analysing these challenges in the context of graffiti provides insight into how these barriers may hinder the effective application of socio-technical approaches.

**Keywords:** Soft Systems Methodology, Ideal Speech Situation, Socio-technical Approach, Graffiti

#### 1 Introduction

Graffiti is the illegal act of inscribing writings or drawings [1]. There are four main genres of graffiti: tag, (master)piece, throw-up and character [2]. Taggers sign their name usually in one colour; graffiti writers create the more complex pieces (comprising text and pictures), throw-ups (a bubble-letter design) or character piece that includes a cartoon-style character figure. Graffiti writers are a sub-cultural group who are under represented in academic literature [3].

Graffiti is a cultural phenomenon that is subject to a perplexity of conflicting perceptions. Graffiti is described as a sign of urban decline [4] and as a serious art [5]. The presence of graffiti impacts perceptions of safety by local residents [6] resulting in the UK spending £1bn removing graffiti [7] yet the removal of an illegal painting in North London outraged the local community [8]. Graffiti has growing commercial appeal [9] and can be considered representations of social history [1] that need to be preserved. The removal of graffiti is therefore based on the premise of either restoring value to a community, or by recognising value and the need for preservation and profit [8]. Graffiti is a situated act occurring within a community of practice; an urban text [10] with its own codes [9] forming a cultural artefact [1] that is a part of social heritage. Open communication is needed within a systems approach to explore the conflicting cultural perceptions of graffiti situated in a social context.

Socio-technical approaches are based on an appreciation of the social norms and participation of people in a socially situated context [11]. Problem structuring methods help participants to engage in a more balanced conversation that approaches the Ideal Speech Situation [12]. Candid participation in Soft Systems Methodology (SSM) [13] can be hindered by the prevailing political culture of a context [14, 15]. This position paper reports a pilot study exploring the contradictory perceptions of the social phenomenon of graffiti with the aim of assessing the extent to which open communication of the Ideal Speech Situation [16] can be addressed using SSM. The results of the pilot study will be used to inform the design of a wider study exploring perceptions of graffiti culture.

Section 2 outlines the methodology used to gain an understanding of the conflicting views of graffiti that form the problematic situation in SSM. The initial results of applying SSM to understand perceptions of graffiti are presented in section 3. Section 4 discusses the challenges of gaining a true appreciation of a situation within the context of socio-cultural barriers and reflects on the extent to which an Ideal Speech Situation can be achieved. The limitations of the study are noted and the paper concludes by considering the further work needed to accommodation challenges of socio-cultural barriers within socio-technical applications.

#### 2 Methodology

SSM offers a systemic framework to surface and explore different perceptions in a problematic situation. It advocates systemic interpretation of social and cultural factors that are important in interpreting a situation [17]. The process of SSM involves the collection of each stakeholder's worldview, which is then used to model a human activity system. This study focuses on piloting a means to gather the views of graffiti writers and the general public in order to express the problem situation and then to develop root definitions of relevant human activity systems.

The design of the pilot focused on addressing three main challenges. The first challenge was how to gain access to graffiti writers due to the illegal nature of graffiti. Access to graffiti writers was facilitated by a graffiti photographer, trusted by the writers, using the photography sharing application Instagram.

The second challenge was how to quickly collect data to identify the issues arising with data collection before embarking on a wider study in such a way as to minimize the risk of influencing the results in the later study. Graffiti writers were asked via Instagram for one word to describe graffiti. This task reflected the simplicity of Instagram as a means of communication and tested the willingness of writers to participate in research. Respondents could see the words submitted by previous respondents. This may have influenced both their decision to participate and the nature of their response as graffiti is about being seen by peers.

As graffiti is viewed in the physical world, commuters at a railway station in a UK city were asked for one word to describe graffiti. The commuters could not see the

words given by other commuters. The commuters were not asked whether they engaged in graffiti themselves as graffiti writers often do not disclose their engagement with graffiti such that colleagues and close friends are often unaware of their involvement in the graffiti culture. As this is a pilot study exploring the suitability of SSM as a means to study perceptions of graffiti, it is considered that this does not affect the validity of the results for the purpose of the pilot.

The third challenge in the pilot was how to mitigate the potential for the researchers to influence the collection and analysis of the data. Due to the nature of the subject, all researchers will have seen graffiti and have their own opinions about it. The four authors were each assigned specific roles to reduce the potential for their perceptions to influence the research and to mitigate the risk as far as possible, of respondents providing the response that they think the researcher is seeking. The graffiti photographer gathered and presented the data from graffiti writers to leverage their relationships with the writers. A researcher unfamiliar with the practice or research of graffiti gathered and presented data from the commuters to minimize the potential for influencing respondents.

The Instagram data and the survey of commuters resulted in two lists of words. Treating the words as objective data stripped the words of the context that had given them meaning and value, adopting a neopositivist stance [18]. The first stage of SSM is to gain a rich picture of the situation. Stripping the words of the context that had given them meaning reduced the richness of the information captured. In analysing the results, the words were therefore represented in a form that was sensitive to the context they had come from, adopting a localist stance of the information collected as "situated accounts" [18]. By changing the presentation of the data, the objectivity of the data been reduced but the potential information value has increased forming a rich picture of the situation in SSM.

A research/practitioner of SSM with no prior involvement in the practice or research of graffiti derived worldviews from the data captured from graffiti writers and commuters. The research was overseen and documented by a researcher familiar with research relating to both graffiti and SSM. They had no involvement with the data collection and data analysis, focusing on the suitability of SSM as a means to study perceptions of graffiti and how the practice further informs understanding of SSM.

### 3 Results

Fig. 1 shows responses received from graffiti writers across the world and Fig. 2 shows from commuters in the UK. The free expression of the wall of words from graffiti writers deliberately contrasts with the ordered words from the public forming a rich picture of the situation. The responses from the graffiti writers reflect the nature of the act of graffiti (naughty, risky, addictive), a sense of community (family, nostalgia, childhood) and a deep rooted relationship with graffiti (release, triumph, misunderstood). A few writers referred to the graffiti artefact (letters, art, skill) which was reflected by the

commuters (artistic, colourful, mural). The responses from commuters reflected contradictory perceptions; negative connotations of disgust and vandalism set against more positive connotations such as creative, fascinating and inspiring.

Analysis of the word lists were used by the SSM practitioner and researcher to derive the potential worldviews shown in Table 1. More work is needed to explore these views further to develop root definitions of human activity systems.

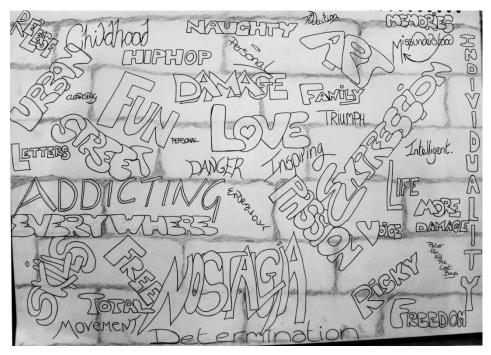


Fig. 1. Wall of Words Perceptions of Graffiti from Graffiti Writers



Fig. 2. Wall of Words Perceptions of Graffiti from Commuters

Worldviews of Graffiti Writers on the Act of Graffiti	Worldviews of the Viewing Public on the Writing of Graffiti
<ul> <li>Graffiti is:</li> <li>A secret society which enables an anonymous expression of alter ego;</li> <li>Anti-establishment;</li> <li>An expression of alter-ego in a public domain;</li> <li>An expression of rebellion against the established social order;</li> <li>A foil against a safe, professional, respectable existence;</li> <li>About creating public art;</li> <li>An expression of power.</li> </ul>	<ul> <li>Graffiti:</li> <li>Defaces the built environment;</li> <li>Undermines social order;</li> <li>Is an imposition of ego;</li> <li>Confirms the irrepressible free spirit of human beings;</li> <li>Is anti-establishment;</li> <li>Is an intriguing insight into another dimension;</li> <li>Expresses creativity.</li> </ul>

### 4 Discussion

The results shown in Fig. 2 reflect the contradictory perceptions of graffiti documented in the literature [e.g. 5, 4]. Through the worldviews in Table 1, the application of SSM has started to offer an insight into the culture of graffiti as a perceived secret society which fascinates as well as disgusts commuters.

The validity of the results is dependent on the extent to which open communication was achieved therefore needs to be considered. There are four aspects of dialogue to form the Ideal Speech Situation [16]: inclusiveness, equal rights, no deception and absence of coercion. This pilot study limited *inclusion* to a sample of two groups of participants, the graffiti writers and the commuters (who potentially could also have included graffiti writers); however, there are other stakeholders in the graffiti culture, such as the local councils who remove the graffiti, the transport police, spray paint manufactures, anti-graffiti coating manufacturers, promoters of graffiti. Although a wide selection of stakeholders is important [19] this can hinder the openness of the communication such that participants fail to raise issues that might raise if specific stakeholders were not present [15]. The secret illegal nature of the subculture limits access to those embedded in the culture and prevents researchers from facilitating a meeting of stakeholders, thereby limiting a key benefit of SSM in enabling stakeholders to understand different views held [15].

Graffiti writers seek recognition from their peers and use their work to create an "ego-footprint" [3]. The influence of ego on the responses from writers therefore needs to be considered, particularly as in this pilot all responses could be seen by the writers, which may have influenced both their decision to participate and their response. Ego and power are not restricted to writers, studies such as [15] refer to the difficulty of using SSM in situations where power restricted participation and influenced the communication. Contextual factors such as status, expertise and responsibility can hinder the ability for *equal* and open speech [20]. Dialogue is therefore always constrained by personal, cultural and political barriers (such as not wanting to cause offence; maintain status or fear of repercussions).

Graffiti is described as being candid [21] supporting the principle of *no deception*, but this omits the inherent nature of the culture to be seen and the desire to provoke reactions. This is further complicated as graffiti writers adopt multiple identities [22]. Individuals change their behaviour in response to a situation; the use of tactics such as deception will depend on the context in order to maintain images and achieve goals [23]. Reponses only reflect the world view of an individual at a specific time in a specific context [18]. The sincerity of speech will depend on the intentions of the participants which will be influenced by levels of trust [12]. In the Instagram survey, respondents were communicating with a trusted source, though ego and the desire for recognition and inclusion may be considered as a form of *coercion*. In the public survey, trust was not pre-established and respondents may have been cautious; however, the lack of prior (or potential future) relationship between the commuters and the researcher may have facilitated a more honest response.

### 5 Limitations and Future Work

This pilot study to explore the challenges of establishing the Ideal Speech Situation using SSM to gain an understanding of perceptions of graffiti has a number of limitations. First, social media provided a means to gain access to graffiti writers, though this approach can reduce the commitment of respondents to engage in a meaningful way [24]. Future work will involve interviews with writers to further explore their cultural perceptions of graffiti. Second, perceptions of graffiti differ depending on the type of graffiti [6] but no differentiation of types of graffiti was made in this study. The commuters were asked about graffiti without a predefined context and their responses are therefore based on their prior experience of graffiti, which may have been influenced by the graffiti they had seen most recently in the area. In the next phase of work, members of the public will be shown examples of graffiti to provide a context for exploring their perceptions and the factors influencing the perceptions.

Third, respondents were asked for one word to describe their view of graffiti. Words are an integral element of culture [25] providing initial insight into the different cultures of those who write graffiti and those who view it. As words have different meanings in different cultures [18], trying to understand language from another culture is problematic as both the cultural context and structure of thinking differs [26]. An appreciation of the lebenswelt (life-world), of the lived experience of different cultures is needed to inform understanding of different perceptions and the root of those perceptions [26]. Further research to explore the cultural context that informs the perceptions of graffiti expressed in this research by graffiti writers and the public is therefore needed.

#### 6 Conclusions

The results of this pilot study support current literature that conflicting perceptions of graffiti are held by the general public. Through the application of SSM potential world views held by the public and graffiti writers have been derived, providing insight into the culture of graffiti. A view of graffiti emerges as secret society that simultaneously fuels intrigue and dismay in the viewing public whilst fulfilling the needs of belonging and identity of graffiti writers. The application of SSM has started to facilitate greater understanding of graffiti culture, suggesting that SSM is a suitable method for exploring perceptions of graffiti.

In turn, exploring graffiti through the lens of SSM has surfaced issues about the extent to which open and candid communication can be facilitated. Applications of SSM have the potential to surface different perceptions but are dependent on a rich picture being developed that is a true and meaningful representation of the situation to those in the situation. The ability to explore perceptions and the values on which they are built is challenged as communication is driven and constrained by strong cultural structures. The ego of graffiti writers striving for recognition from peers influences the extent to which an Ideal Speech Situation could be attained. Similar constraints of powerful cultures affecting the application of SSM have been reported [15]. Further work

is needed to develop a means to accommodate the challenges of power to open conversation, which is at the core to social-technical approaches, by surfacing and acknowledging the inherent existence of power in socially situated contexts.

## 7 References

- Forster AM, Vettese-Forster S, Borland J (2012) Evaluating the cultural significance of historic graffiti. Struct Surv 30(1):43-64.
- Novak D (2015) Photography and classification of information: proposed framework for graffiti rt. Street Art & Urban Creat J 1(1):13-25.
- Taylor MF (2012) Addicted to the risk, recognition and respect that the graffiti lifestyle provides: towards an understanding of the reasons for graffiti engagement. Int J Ment Health Addict 10(1):54-68.
- 4. Nigro HC, Císaro SEG (2014) Prediction of citizen satisfaction with local government based on perceptions of physical disorder. J Place Mgt and Dev 7(2):153-175.
- 5. Eyck TAT (2016) Justifying graffiti: (re)defining societal codes through orders of worth. Soc Sci J 53(2):218-225.
- 6. Austin DM, Sanders C (2007) Graffiti and perceptions of safety: a pilot study using photographs and survey data. J Crim Justice Pop Cult 14(4):292-316.
- 7. Cathcart-Keays A (2015) Is urban graffiti a force for good or evil? The Guardian 7 January 2015. https://www.theguardian.com/cities/2015/jan/07/urban-graffiti-force-good-evil
- Hansen S, John FD (2015) 'This is not a Banksy!': street art as aesthetic protest. J of Media & Cult Stud 29(6):898-912.
- 9. Ferrell J (2009) Hiding in the light: graffiti and the visual. Crim Jus Mat 78(1):23-25.
- 10. Carrington V (2009) I write, therefore I am: texts in the city. Vis Comm 8(4):409-425.
- 11. Sawyer S, Jarrahi M (2014) The sociotechnical perspective. In: Tucker A, Topi H (ed) crc Handbook of computing, 3rd edn. vol 2. Chapman and Hall, New York.
- 12. Franco LA (2006) Forms of conversation and problem structuring methods: a conceptual development. J Oper Res Soc 57(7):813-821.
- 13. Checkland P (1981) Systems thinking, Systems practice. John Wiley, Chichester.
- 14. Kirkham S, Cox S (2017) Understanding the contribution and challenges of using soft systems methodology to facilitate cultural change: a case study in the public sector. Working Paper, Birmingham City University, UK.
- 15. Proches CNG, Bodhanya S (2015) An application of soft systems methodology in the sugar industry. Int J Qual Meth 14:1-14.
- 16. Habermas J (2008) Between naturalism and religion: philosophical essays. Polity, Cambridge.
- 17. Checkland P, Scholes J (1999) Soft systems methodology in action. Wiley, Chichester.
- Qu SQ & Dumay J (2011) The qualitative research interview. Qual Res Acc & Mgt 15(3): 238-264.
- 19. Shaw D, Edwards JS & Collier PM (2006) Quid pro quo: reflections on the value of problem structuring group workshops. J Oper Res Soc 57:939-949.
- 20. Gillespie A, Reader TW, Cornish F, Campbell C (2014) Beyond ideal speech situations: adapting to communication asymmetries in healthcare. *J Health Psychol* 19(1):72-78.
- 21. Tracy SK (2005) The graffiti method. Austral Midwifery 18(3):22-26.
- 22. Valle I, Weiss E (2010) Participation in the figured world of graffiti. Teach Teach Educ 26(1):128-135.

- 23. Mtshelwane D, Nel JA, Brink L (2016) Impression management with Zulu culture: exploring tactics in the work context. SA J Ind Psych 42(1):1-13.
- 24. Heng MSH, de Moor A (2003) From Habermas's communicative theory to practice on the internet. Inf Sys J 13(4):331-352.
- 25. Dingley S, Shah H, Golder P (2000) Tribes of users and systems developers. *Austral J Info Sys* 7(2):20-31.
- 26. Weber B (2008) J. Habermas and the art of dialogue: the predictability of the ideal speech situation. Anal Teach 28(1):1-8.