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Linguistic Variation in Iranian University Student Graffiti: Examining the Role of Gender

Abstract

Research on the discursive features of graffiti in institutional settings is in its infancy and few studies have investigated the phenomenon and its implications in educational contexts. In this paper, we report on a study in which we employed systemic functional linguistics (Halliday, 1975) to probe communicative functions and gender differences in Iranian university student graffiti that appeared in all-male and all-female locations. The data comprised authentic instances of graffiti generated by students, analysis of which suggests that male and female university students each have their own distinctive motives for using graffiti, as realised in significant differences observed in the context-specific functions they perform. Graffiti pieces represented a distinctive and meaningful way of communicating, and its most salient features were creativity, simplicity and variation. Indications are that university students' graffiti reflects psychological and social challenges, and the thoughts, attitudes and feelings expressed through it serve students' personal and interactional purposes.

Keywords: Academic context; Educational psychology; Graffiti; Language functions; Linguistic variation.

1. Introduction

The word 'graffiti' is of Italian origin and derives from the verb 'graffiare', meaning 'to scratch' (Sheivandi et al., 2015). Graffiti itself has been perceived variously as a type of crime (Ferrell, 1997; Austin, 2002), an art form (Merrill, 2015) and a vehicle for political expression (Jorgenson & Lange, 1975; Hanauer, 2011). It is essentially a pictorial and/or written inscription on a publicly available surface (Campbell, McMillen, & Svendsen, 2021), although more precise definitions of graffiti appear to elude any consensus. For the purpose of this study, however, we invoke Abel and Buckley's (1977) definition of graffiti as "a form of communication that is both personal and free

of everyday social restraints that normally prevents people from giving uninhibited reign to their thoughts" (p. 3). Consistent with Abel and Buckley's perspective, we see graffiti as a window into individuals' mental states, social constraints, and obsessions. Graffiti is an important aspect of culture that acts as a *tell-tale sign* by revealing peoples' attitudes (Ouaras, 2018; Stocker et al., 1972), and in this sense is 'psychologically real' (Dancygier & Vandelanotte, 2017).

In order to be seen and acknowledged easily by others, graffiti is more often than not observed in public locations where it offers commentary on what are frequently political or sexual subjects, and does so in language that is typically direct, unfiltered and thus often perceived as crude or coarse. Furthermore, it is an expensive crime in that erasing graffiti from city walls and buildings is a costly activity; as such, it is widely considered illegal by governments (Debras, 2019; Lachmann, 1988; Mitzen, 2019). Yet it has been and remains a popular activity among youth across multiple different cultures (Austin, 2016; Parks, 1995; Swenson, 2018). This being the case, the university context is of particular interest in relation to the phenomenon in that students attending these institutions of higher education are transitioning through a period in their lives when they are especially likely to experience emotional turbulence (Hefner & Eisenberg, 2009; Mills & Unsworth, 2018). For many of these students, most of whom will only recently have graduated from high school, their introduction to higher education, with its co-ed system, will not only be new and exciting but also challenging and stressful as they are exposed to new ideas and begin questioning and testing their own values, and 'finding' themselves. The added pressure can come from the fact that, of necessity more than choice, they end up processing these experiences in the absence of the familiar support networks of their families and home towns from which they may suddenly feel remote (Mangeya, 2019; Rodriguez & Clair, 2009). Furthermore, tensions and worries can arise as a result of project or assignment deadlines, examinations, the burden of tuition fees, having to manage their own budgets for the first time, homesickness, and the fact of having to establish new social networks. Griffiti has the potential to serve as a pressure valve as students strive to cope with this new upheaval in their lives, by providing a cheap and readily available medium through which they can express their feelings and attitudes and challenge the status quo.

The study we report on in this paper explores the various communicative functions of graffiti and what they can reveal about salient and often prevalent values held within the social context where it is created. That is, the fact that university students (in this case) create graffiti and feel moved to do so as a result of a major transition from high school to university that is likely to

be life-changing, suggests that graffiti can provide us with a window into how culture and ideology can contribute to an understanding of communities' psychological and social challenges, as well those of the individuals who produce particular pieces of graffiti.

In our analysis, we draw on systemic functional linguistics (Halliday, 1975) to code samples of university student graffiti observed in different university locations according to its functions and gender differences. We analyse its discursive content in order to reveal the thoughts and values expressed by students able to communicate them freely and unobtrusively through this medium. As such, our findings promise to make a meaningful contribution to work in educational psychology through which the challenges, obstacles, desires, and obsessions that students face and which have the potential to be detrimental to their academic progression can be better understood. The research questions guiding the study were as follows:

A : What are the common communicative functions observed in Iranian university student graffiti?

B : What gender differences, if any, are observable in the functions expressed in Iranian university student graffiti?

The remainder of the paper is structured as follows: In Section 2, a selection of existing works relevant to the current study are reviewed and the research gap established. This is followed, in section 3, by a description of the methodology and theoretical framework employed. In Section 4, qualitative and quantitative analyses of the data are presented, along with a number of illustrations designed to provide examples of the different kinds of linguistic functions manifested in Iranian university student graffiti. Finally, we present our conclusions in Section 5, along with a statement concerning limitations of the study and suggestions for further research.

2. Review of the literature

Graffiti has been with us for millennia and can be said to be traceable to prehistoric parietal art found in caves. The first scientific study of graffiti dates back to 1935 when, during his travels to the West, Allen Walker Read noticed an abundance of graffiti on the stalls of public restrooms, in reference to which he reflected: "[i]t was borne upon me that these inscriptions are a form of folklore that should be made the subject of a scholarly study" (Read, 1935, p. 17). He went on to record his research into the phenomenon in his book *Lexical Evidence from Folk Epigraphy in Western North America: A Glossarial Study of the Low Element in the English Vocabulary* (cited in Abel & Buckley, 1977). A number of studies subsequently appeared, building on this pioneering work and in which graffiti was found in various different contexts, including restrooms (Otta et al., 1996; Phua, 2020), universities (Debras, 2019; Farnia, 2014; Nwoye, 1993), subways (Castleman, 1982; Diniz & Stafford, 2021) and parks (Evered, 2019), was analysed. In all these contexts, graffiti can be seen as a manifestation of self and a reflection of the sociocultural issues germane to that self. As Nihat Şad and Kutlu (2009, p. 39) observe, "[g]raffiti is about self-expression. When youth cannot find people to listen to them, they may express their keenly felt, internal experiences and emotions safely by writing on public property." Such expression often finds 'voice' in pictorial graffiti, which has received a great deal of attention from researchers (Dancygier & Vandelanotte, 2017; Divsalar & Nemati, 2012; Zakareviciute, 2014).

Graffiti is thus a form of communication through anonymous texts and pictures from which it is possible to derive insights into the discursive tensions that arise from the way(s) individuals see the world around them. Accordingly, it provides a means through which "to vent frustrations to say things you wouldn't dare speak up about . . . because sometimes you feel like letting the whole world know how you're feeling w/out [without] giving yourself away" (Fraser, 1980, p. 258). Graffiti can reveal an individual's affective states and personal values, and researchers (e.g. Hedegaard, 2014; Rodriguez & Clair, 1999; Scheibel, 1994) have acknowledged the importance of studying graffiti among students in academia as a means of self-disclosure and self-definition, thereby shedding light on their values, concerns and obsessions.

Although graffiti has been studied in a range of disciplines, including linguistics, anthropology, cultural studies, politics, psychology, art, and communication (Farnia, 2014; Oganda, 2015; Pietrosanti, 2010; Vandelanotte & Dancygier, 2017), there is a paucity of research conducted specifically focusing on the higher education context. What research there is has tended to explore the main themes or the linguistic features of graffiti in different contexts (Ahangar & Shirvani, 2016; Al-Khawaldeh et al., 2017; Farnia, 2014; Gonos et al., 1976; Nwoye, 1993). In this regard, Nwoye (1993) carried out a study of graffiti generated by college students at a campus in Nigeria. These findings showed that graffiti is used, often by minority groups, as a medium for voices of social change, protest, or expressions of community. In this respect it is noteworthy that a significant and growing number of studies have been conducted with a focus on women as a

minority group with regard to self-expression, something Nwoye observes while simultaneously arguing that students similarly constitute a minority group in need of a proper setting for the expression of their ideas and opinions:

Women as a subgroup denied access to public speech and writing have begun to receive some attention, but a similar minority group, students, numerically and organizationally weaker, have not received adequate attention in their attempts to articulate their views when mainstream society has denied them the means of doing so through established media. (Nwoye, 1993, p. 440)

In another study on Thai university student pictorial graffiti, Lapyai (2003) concluded that they were an expression of student resistance to authoritarian power observed on campus and to cultural oppression and sociocultural taboos that Thai society places on youth in areas such as sexuality and cultural ideals. They were a vehicle through which to voice feelings of repression, claim self-identity, frighten others through hostility and violence, and satisfy sexual desires.

Other studies have focused on the way student graffiti sheds light on deviance in society. For instance, Schreer and Strichartz (1997) collected graffiti from two American campuses in New York. The graffiti was categorised according to sex, institution, and type of building. Chi-squared analyses indicated that men's restroom graffiti included significantly more cases of insulting and scatological references but not more sexual graffiti. On the other hand, women's restrooms included more political graffiti than men's but very few romantic inscriptions. Based on the results of this study, Schreer and Strichartz observed that "private restroom graffiti appear to provide a useful and unobtrusive method for investigating controversial and sensitive social issues" (p. 1067). Ferris and Banda (2018) investigated graffiti in men's and women's toilets at the University of the Western Cape and found out that pictorial graffiti serves to demonstrate ideological and identity manifestations that can represent idiosyncrasies across space and time. Ball (2020) used desktop graffiti as an unobtrusive way to study the campus climate at Virginia Tech, where the deadliest school shooting in U.S. history occurred. Employing content analysis, the study revealed that university graffiti can signal to authorities the reasons behind social deviance, such as the one observed in Virginia Tech. Meanwhile, Wang, Privitera, Jiang, and Zai (2020) conducted two studies designed to explore college pictorial graffiti. The first study qualitatively analysed toilet graffiti within universities located in Central China. Findings revealed that: "(1) sex, love, and self-exploration are the most common themes in bathroom graffiti; and (2, male graffiti was dominated by sex while female graffiti focused on love and sex" (p. 945). The second study investigated the tendency of university students to create bathroom graffiti. Findings revealed that (1) males were more inclined to create pictorial graffiti about sex, social phenomena, verbal bullying, and teasing than female students; and (2), junior students were more inclined to create bathroom graffiti than freshmen. The authors surmise two reasons for this (pp. 12-13): one, that "first-year students were in a transitional stage from secondary school to college or university and had not yet learned to express themselves freely in such a liberal environment", and two, that "students in higher grades have had more life experience, including opportunities to explore the topics that might serve as the focus of their bathroom graffiti." Their findings also revealed that "sex and love were two prominent themes observed" (p. 9).

In the Iranian context, few studies have been conducted on pictorial graffiti since they are usually a means for challenging political or cultural stereotypes, and hence it is deemed illegal by virtue of its content. In this regard, Kousari (2010, p. 65) mentions that "the Iranian new graffiti creators are young people who do not act in line with the official culture, but sometimes conflict with it and even find fun in such an experience. It is a way of identification for them." Zandi (2014) investigated two types of graffiti, namely textual and visual writings, and came to the realisation that "informal writing motifs were more than educational, political and religious motifs" (p. 335), and that religious motifs comprised the least commonly occurring type of graffiti. Farnia (2014) investigated graffiti on university classroom walls and, using thematic analysis, revealed the presence of a variety of themes while also discovering that sexual and racial graffiti was absent from the data. Meanwhile, Sheivandi et al. (2015) studied linguistic features in Iranian graffiti and found that dialogues were the most frequently occurring type of discourse present in textual graffiti. Resorting to Linguistic landscape, Shariatpanah et al. (2022) studied the representation of multilingualism in the graffiti found on walls in Kermanshah and discovered that it derived from informal culture as expressed by ordinary people. Jokar et al. (2022) investigated 705 instances of graffiti found in two high schools in Tehran and Karaj. The results of the study revealed that graffiti was used primarily to express emotions such as 'love' and 'hate'. In a study of graffiti appearing in the Iranian town of Ekbatan, Eslamdoost, Beiranvand, and Hassanzadeh (2019) concluded that

most instances of graffiti "had social themes and the dominant semiotic elements included words and human figures" (p. 45).

Collectively, these studies highlight the fact that Iranian graffiti embraces rich and diverse cultural and social elements.

Although research on graffiti found in different university locations (e.g., toilets, desktops, classrooms) has been conducted in numerous countries, few published studies exist that focus on university graffiti in Iran, a country whose citizens derive from diverse cultural backgrounds. In this regard, Farnia (2014) states that "Iranian graffiti culture is probably unique in its themes, more particularly the contents of its graffiti themes" (p. 55). Since pictorial graffiti, like textual graffiti, is reflective of society and culture, investigating Iranian university graffiti can shed light on the ideologies and values embedded in it.

3. Method

3.1. Sampling

Motivated by a desire to study and delve into a variety of aspects of the language, culture and value systems of Iranian university students, a corpus of pictorial graffiti was compiled and its linguistic content transcribed, categorised, and coded. A total of 244 graffiti pictures were collected from two public universities in Semnan Province, Iran. Of these 244 pictures, 111 were related to female-only locations and 133 cases were observed in male-only locations. Data were not collected from mixed-gender contexts, such as classrooms and university corridors, as we were particularly interested in the role of gender in the production of pictorial graffiti and thus needed to be able to distinguish and differentiate between graffiti produced by male students and those produced by female students. Since there is a gender-segregation policy in Iran, men and women have separate dormitories, libraries and toilets; consequently, data were collected from dormitories, library study booths, and toilets in two public universities. The textual graffiti was mainly in Persian (the official language of Iran), with very few instances of graffiti in other languages such as Arabic and English.

3.2. Procedure and analysis

Four trained recorders (two male and two female students) were assigned to collect examples of graffiti from the three specified locations in the two universities selected. These trained recorders were asked to take clear pictures of the graffiti they observed in these locations. The data collection process took almost three months during which time 244 instances of graffiti were identified. As only registered students could access dorms and libraries, the researchers were unable to take part directly in the data collection process. Following their collection, the graffiti were classified according to location and gender. Their subsequent analysis, described below, illustrates how a culturally and socially loaded phenomenon can be described at different levels in order to obtain a more comprehensive picture of the language functions realised in the graffiti, and their underlying affective states. The analysis focuses on a representative sample from the corpus (the graffiti pieces are generated by students from different cultural and linguistic backgrounds) and employs Halliday's (1975) model of language functions, presented in Table 1:

Category	Meaning	Example
Instrumental	To express their needs	I need help making a robot.
Regulatory	To influence the behaviors of others	You do that other thing.
Interactional	To form relationships	'Love you' Mommy.
Personal	To express opinions or emotions	Me good girl.
Heuristic	To seek information and ask questions	How do you make purple?
Imaginative	To express creative language	Let's pretend.
Representational	To give information, facts, and explanation	I will tell you.

 Table 1. Halliday's model of language functions

As his model of language functions indicates, Halliday sees language as essentially a social phenomenon, as meaning potential that gets realised in authentic contexts of use and thereby enables its users to achieve their communicative purposes. In this view, language cannot be disaggregated from its context of use if the nature of communication – and of communicative competence – is to be fully understood, and its users to use it in situationally appropriate ways. This view of language as social semiotic and cultural code is in sharp contrast to Chomsky's formalist of view of language according to which he (deliberately) concerns himself only with

the formal features of language, devoid of any consideration of context of use and which, he argues, reflect the operation of a Universal Grammar.

The language function analysis was used to identify prototypical functions evident in the graffiti, which were then subjected first to content analysis, to capture the motives behind the graffiti, and then to quantitative analysis, to uncover the significance of any differences observed between male and female graffiti. The frequency of the different functions of authentic pictorial graffiti collected on site was calculated as well as the frequency of the different functions that were featured in the data. For each function, examples were subject to analysis. While the pictures themselves are not the focus of this study, the linguistic content embedded in them is.

The data were analysed several times and coded independently by two researchers so as to ensure consistency. Functions and linguistic content were extracted based on the research questions. In the final stage of coding, connections between codes were sought in order to identify the core communicative functions within the data. The researchers sorted the data into belief categories and developed a detailed written description for each category. About 85% of the coded data were re-analysed by a research assistant to help ensure that there was consistency in the coding.

4. Results

In what follows, the data are first analysed qualitatively according to common language functions and gender differences, with examples from the original data being provided in the commentary by way of illustration. Then, the less- and more-frequent functions are discussed. Finally, a Chisquare test is run with the purpose of analyzing the significance of any differences observed between the male and female pictorial graffiti. This quantitative analysis helps us ascertain whether gender is a determining factor in the distribution of data.

4.1. Qualitative analysis of the data

In this part, the graffiti pieces are presented and analysed through interpretive content analysis. For each function, authentic examples are used from our data and English translations are provided for each example.

4.1.1. The instrumental function

The function least in evidence in the data is the instrumental function (women = 2, men = 6). This function deals with language that is used to fulfil a need, such as to obtain food, drink or comfort, and typically includes concrete nouns. Figures 1 and 2 provide original examples from the data that realise this function:



Figure 1. Sample graffiti observed in a men's library exemplifying the instrumental function

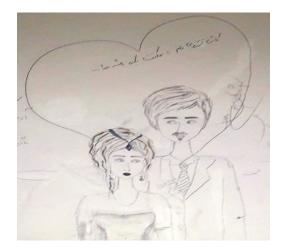


Figure 2. Sample graffiti observed in a women's dorm exemplifying the instrumental function

In Figure 1, the graffiti asks for help from God, while in Figure 2 the graffiti indicates a desire (to marry her beloved) expressed through an image of a bride and a groom celebrating their marriage. In these two items of graffiti, the creator of the graffiti asks God for help to satisfy their dreams or to solve their problems by removing barriers. Because of the religious beliefs of Iranian students, most of them resort to a divine source (i.e. prophets or God) when they need help to achieve their dreams or to solve their problems. The original text in Figure 2 is¹:

- kp:f p:rezu:je delæm bp: hekmætæt jeki: bp:fæd xodp:.
- God, I wish my dream matches with your destiny.

4.1.2. The heuristic function

¹ The International Phonetic Alphabet (IPA) has been used to transcribe the data. IPA is an alphabetic system of phonetic notation based primarily on the Latin script. https://en.wikipedia.org/wiki/Help:IPA/Persian

The heuristic function comes next in the list of observed frequency (women = 5, men = 7). Through this function, language is used to explore, learn and discover, and questions typically feature (see samples in Figures 3 and 4).

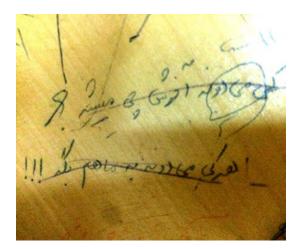


Figure 3. Sample graffiti observed in a men's dorm exemplifying the heuristic function

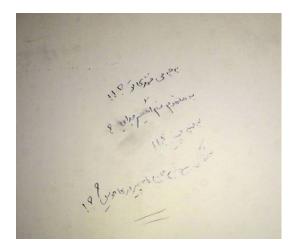


Figure 4. Sample graffiti observed in a women's dorm exemplifying the heuristic function

In Figure 3, the graffiti asks a question from the unknown reader: 'Who knows what will happen in the end?' The original text is:

- *ki: mi:du:ne p:xæref tfi: mi:fe? hærki: mi:du:ne be mp: hæm bege.*
- Who knows what will happen in the end? If everyone knows, let us know as well.

This is a kind of rhetorical question to which the answer is clear: no one knows what will happen. It is intriguing to ask why these questions are asked when it is understood that there is nobody able to answer them. It seems likely that they offer a kind of catharsis for the writer by providing a vehicle through which to reveal and thereby 'unload' their inner reflections, feelings or obsessions. The rhetorical question posed has relevance to everyone's life: What is the meaning of life? The suggestion is that the creator of this graffiti is struggling to understand the true meaning of human existence, a struggle that can shed light on other aspects of life, such as personal desires and social relations.

Figure 4 similarly solicits information from the reader. The first sentence in this piece of graffiti is an interrogative: What are you laughing at? The graffiti itself provides an answer, also in the form of a question: [You are laughing] at the sad idea of separation? This graffiti demonstrates a depressing situation that its creator is experiencing, namely the sadness of losing a loved one. The transition from high school, with its same-sex environment, to university, with its mixed-gender environment, can create turmoil for the students, with many of them seeking to experience love affairs that can provoke new feelings one result of which is that "[y]oungsters [in Iran] have been using walls to express their love and passion" (Khosravi, 2013, p. 15). The original text in Figure 4 is:

- be tfe mi:xændi: to?! be mæfhu:me qæm-ængi:ze dʒodp:ji:? be tfe tfi:z? be fekæste dele mæn, jp: be pi:ru:zi:je xi:f?
- What are you laughing at? At the saddening concept of separation? At what? My broken heart or your victory?

4.1.3. The imaginative function

The imaginative function is the next category and one that is less frequently observed in the data (women = 4, men = 13). Here, language functions to tell stories and create imaginary constructs. Figures 5 and 6 provide examples of this function:

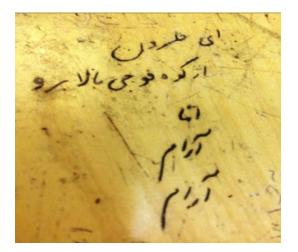


Figure 5. Sample graffiti observed in a men's library exemplifying the imaginative function

Figure 6. Sample graffiti observed in a women's toilet exemplifying the imaginative function

The imaginative use of language among university students' pictorial graffiti has not been acknowledged by previous research. These instances of graffiti can subtly reflect social or cultural realities of society or the affective states experienced by individuals (Campos, 2013). Figure 5, for example, is a visionary interaction with a snail (translation: 'Oh snail, climb up Mount Fuji, but slowly, slowly'), while Figure 6 creatively employs metaphor in making reference to a national political issue (nuclear enrichment and sanctions) to ask her beloved for a kiss (translation: 'A kiss from the beloved can enrich her, while removing sanctions from her'). The original text in Figure 5 is:

- ej hælæzu:n æz ku:he fu:dʒi: bp:lp: boro æmp: p:rp:m p:rp:m.
- Oh snail, climb up the Mount Fuji, but slowly, slowly.

Figure 5 reads as somewhat strange: why should a *snail* ascend Mount Fuji, and why *slowly*? A snail is famous for its slowness of movement ('sluggishness'), and this being the case, asking a snail to move slowly seems redundant —and at the same time ironic. The message is creative and playful, indicating that everything is moving too slowly (a *snail* should *go up* a *high* mountain *slowly*). Students may experience barriers to their educational progression, and sometimes this can create a feeling of despair; the snail in Figure 5 can represent the student who has created the graffiti, and Mount Fuji may represent educational or personal challenges which at times may appear insurmountable. Figure 6 similarly depicts playful language by referring to a critical political issue in Iran (nuclear enrichment) to ask her beloved for a kiss, a kiss that is enriching and reviving. In this case, the beloved has the ability to enrich and revive, all through the power of a kiss! The original text in Figure 6 is:

- kæm bp: dele bi:-nævp:je mæn bp:zi: kon, kæm efve-gæri:o np:zo tænp:zi: kon, tæhri:me mærp: ze mæsti:je læbhp:jæt, bærdp:ro bp: je mp:tf qæni:-sp:zi: kon.
- Don't play with my poor heart, be less charming and flirting [with me]; lift my sanction with your lips, and enrich me with a kiss.

4.1.4. The interactional function

A number of functions appeared in the data with comparatively high levels of frequency, one being the interactional function (women = 12, men = 31). The interactional function concerns language that is used to improve relationships and ease interactions, such as 'I love you mummy' or 'thank you'. Figures 7 and 8 illustrate the interactional function using data from the current study. The English translation of Figure 7 is: 'Good morning Tehran, I love you'. This is an example of metonymy, where something (in this case Tehran) is referred to via the name of something closely associated with it (i.e., the people of Tehran). In Figure 8, the graffiti is interacting with an unknown person (unknown to the reader), conveying how much that person is dear to the writer:



exemplifying the interactional function

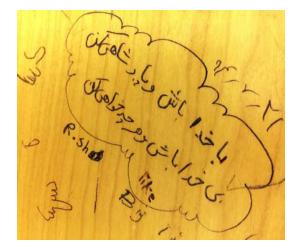
Figure 7. Sample graffiti observed in a men's toilet Figure 8. Sample graffiti observed in a women's dorm exemplifying the interactional function

In Figure 7, the addressee is the entire population of the city of Tehran, while in Figure 8 the addressee is an individual known to the writer; nonetheless, in both instances the goal is to form a relationship via the graffiti. The original text in Figure 8 is:

- kp:f mi:dp:nestæm ke mi:dp:ni: ke tfeqædr du:stet dp:ræm, gole pi:tfæke tænhp:ji:-æm, mæn hær ru:z hær fæb bp: jp:de to sær mi:konæm, pæs hæmi:fe bemp:n væ tæsælp:je xp:teræm bp:f.
- I wish I knew that you know how much I love you, my lonely ivy. I am thinking of you day and night, then stay with me all the time and comfort me.

4.1.5. The regulatory function

The next category in the high-frequency category is the regulatory function (women = 31, men = 22). This function refers to language that is employed with the intention of influencing the behavior of others (e.g., persuading, commanding, or requesting). Figures 9 and 10 provide two manifestations of this function.



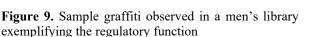


Figure 10. Sample graffiti observed in a women's library exemplifying the regulatory function

The graffiti in Figure 9 invites the reader to consider God in all of their affairs ('be with God, reign') because by doing so they will become kings; the implication being that they will thereby acquire power and authority and thus be prosperous in life. The original text is:

- *bp: xodp: bp:f væ pp:defp:hi: kon, bi: xodp: bp:f væ hær tfe xp:hi: kon.*
- Be with God, reign; be Godless, and do whatever you want.

In Figure 10, the command seems to be created out of frustration (the text ends with 'aargh'), with the writer asking the reader not to leave rubbish on the desk (*ru:je mi:z mævp:de qæzp:ji: nægozp:ri:d*). While not hostile, the tone is certainly not friendly regardless of the fact that the message begins with 'please' and ends with 'my love'. There is a suggestion that littering and a disregard for the cleanliness of the desks is a common problem in this library, and the phrase

'understood, my love?' at the end of the message implies condemnation, even a warning. The original text reads:

- lotfæn ru:je mi:z mævp:de qæzp:ji: nægozp:ri:d, mi:z rp: be hi:tʃ onvp:n kæsi:f nækoni:d, fæhmi:di: eſqæm? mersi: æh.
- Please don't place foodstuffs on the desk. Don't dirty the desk in any way. Understood, my love? Thanks aargh.

4.1.6. The personal function

The next high-frequency category is that of the personal function (women = 41, men = 14). Through this function, the creator of the graffiti expresses personal opinions, attitudes and feelings, and may even the creator may, on occasion also provide their identity. Figures 11 and 12 present two examples of graffiti that realise this function.



Figure 11. Sample graffiti observed in a men's toilet Figure 12. Sample graffiti observed in a women's dorm referring to personal function



referring to personal function

Figure 11 is an interesting case because the emoji icon (laughter) at the end of the sentence is in contradiction to the meaning conveyed by the message, which suggests a depressing situation (his heart is badly broken or is extremely sad):

- *i:n dele mp: be dele hi:t/kæs næmp:nd.*
- My heart is like no one's heart.

Figure 12, which clearly indicates that the art is created by a woman, also conveys a sad experience (her beloved has left her alone and is now with someone else). The image of an upset girl, with her heart being highlighted in black, communicates failure in love and the turmoil the writer was experiencing at the time she created the graffiti. The original text in Figure 12 is:

- u:no be mæn tærdʒi:h dp:di:... kp:f behtær æz mæn bu:d. mæn eftebp:htæri:n entexp:bet bu:dæm, i:no æz entexp:be bæ?di:t fæhmi:dæm. kp:f bi:ftær æz mæn du:stet dp:fte bp:fe.
- You preferred her to me; I wish she was better than me. I was your worst choice; I understood it from your next choice. I wish she loves you more than I love you.

4.1.7. The representational function

Finally, the most observed category among male and female students based on frequency count is the representational function (women = 16, men = 40). This function is largely used to relay or request information. Figures 13 and 14 provide examples of this category.

Figure 13. Sample graffiti observed in a men's library exemplifying the representational function

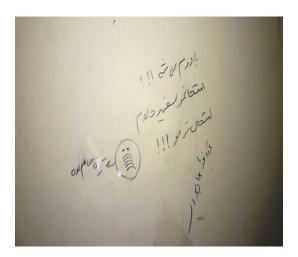


Figure 14. Sample graffiti observed in a women's dorm expressing the representational function

Both these items of graffiti are passing on information to the reader to the effect that the exams taken – or going to be taken – will not render fruitful results. Figure 13 mentions that there is an exam and that the person is not prepared for it:

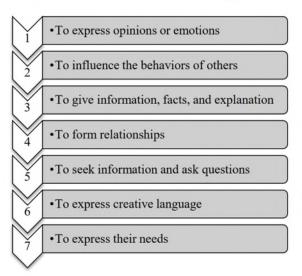
- *bi:ste xordp:d nævædo-pænd3. emtehp:n dp:ræm hi:t/i: næxu:ndæm.*
- It's Khordad 20, 1395 [June 2016]. I have an exam and haven't studied at all.

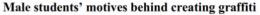
In Figure 14, the text expresses the fact that the writer did very badly on the test and submitted a blank answer sheet. The original text says:

- bp:væræm nemi:[e! emtehp:næmo sefi:d dp:dæm. emtehp:ne termo!
- I cannot believe this! I left my exam paper blank. The final exam!

While one can only surmise the writer's intention in creating this graffiti, it may be that they are seeking to elicit sympathy from readers: by letting others know that failing a test is not something that should be kept secret they may, consciously or unconsciously, be attempting to reduce the psychological burden and anxiety associated with their own test failure by sharing the unpleasant experience with others; once again, a kind of cathartic motivation. For those students who get unsatisfactory marks on their university exams, it can be hard to share the scores with others because they may be judged to be slow learners — or even lazy. Figure 15 manifests male and female university students' main motives for creating graffiti. These motives are sequenced based on the observed frequency in our data.

Female students' motives behind creating graffiti





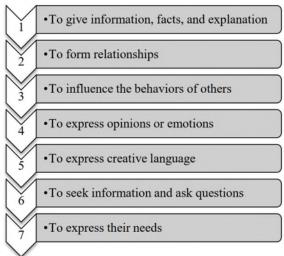


Figure 15. Male and female students' motives for creating graffiti

4.2. Comparing the coded categories: Quantitative analysis

Graffiti functions and frequency counts are presented in Table 2:

Table 2. Categories of graffiti functions with frequencies, percentages, and gender differences

Graffiti functions	Women cases	Men cases	Total
Instrumental	2 (2%)	6 (4%)	8
Regulatory	31 (28%)	22 (17%)	53
Interactional	12 (11%)	31 (23%)	43
Personal	41 (37%)	14 (11%)	55
Heuristic	5 (4%)	7 (5%)	12
Imaginative	4 (4%)	13 (10%)	17
Representational	16 (14%)	40 (30%)	56
Total	111	133	244

Based on Table 2 and for ease of comparison, the functions identified in the graffiti can be divided into two general categories: less frequent (n=37) and more frequent (n=207), with the former including instrumental, heuristic, and imaginative functions, and the latter interactional, regulatory, personal, and representational functions. A general picture that emerges regarding the less frequent functions observed in the data can be seen in Figure 16.

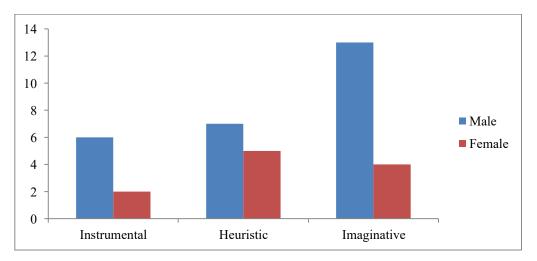


Figure 16. Distribution of data based on the less-frequent functions

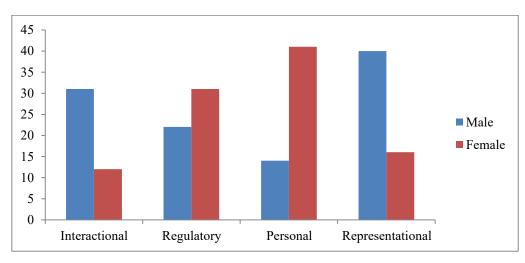


Figure 16 summarises the data relating to the more-frequent observed functions:

Figure 17. Distribution of data based on the more-frequent functions

As revealed in Figure 17, for female students, it is the personal and regulatory functions that are identified most frequently in the data, while for male students it is the representational and interactional functions that are most in evidence.

In the previous sections, the graffiti functions as well as the differences between the observed frequencies between male and female university students were explored, with findings showing that the dominant functions are 'representational' and 'interactional', in the case of male students, and 'personal' and 'regulatory' in the case of female students. To understand whether gender is a determining here, the Chi-square test was applied to the data (see Table 3).

 Table 3. Chi-square analysis of the graffiti functions

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	38.895 ^a	6	.000
Likelihood Ratio	40.159	6	.000
Linear-by-Linear	6.297	1	.012
Association			

N of Valid Cases	244	

a. 2 cells (14.3%) have an expected count of less than 5. The minimum expected count is 3.64.

The Chi-Square test administered in our study goes some way to corroborating the preponderance of qualitative evidence cited in the literature affirming the role of gender in the production of graffiti (e.g., see Bruner & Kelso, 1980; Green, 2003; Wilson, 2008) by similarly revealing gender to be a determining factor in the observed differences between male and female graffiti (the p-value is less than the significance level ($\alpha = .05$)).

5. Discussion and concluding remarks

This study has given us glimpses of how the analysis of graffiti can provide insights into the ways in which culture, gender, and affective states intersect. The graffiti we observed also provided a unique lens through which it is possible to better recognise the relationship between language, culture, and emotional states. Our analysis of samples of graffiti revealed that Iranian university student graffiti serves a variety of communicative functions that are responses to personal, social, psychological, political and cultural factors, and which often implicate issues regarded as taboo (cf. Blommaert, 2013). Graffiti represents a distinctive and meaningful way of communicating, and its most salient features are creativity, simplicity and variation; in this respect, it shares much with slang (Adams, 2009). Having a better understanding of the phenomenon within the higher education context promises to help researchers better appreciate – and university counselling and wellbeing centres better understand and respond to – students' value systems, beliefs and the multifarious challenges they can face as they transition into and progress through their tertiary education at a key stage of their personal development (Fiorella, 2020; Hedegaard, 2014; Liang, 2012; Rodriguez & Clair, 1999; Watzlawik, 2014).

Our study showed strong gender differences with regard to the distribution of data. Graffiti produced by female university students was more concerned with feelings and controlling others, while graffiti produced by male university students was more interactive and informative. With regard to the instrumental, heuristic and regulatory functions of graffiti, gender differences were more subtle, while in the case of other functions, they were noticeably more pronounced.

While graffiti has been widely viewed as vandalism and thus as an antisocial and illegal activity (Ouaras, 2018; Pietrosanti, 2010), our findings suggest that there is perhaps an argument for seeing it in rather more sympathetic terms. Our data exposes affective states and personal concerns for which graffiti provides an outlet and which otherwise might not find expression and be recognised and acknowledged. The insights that can be gleaned from it have the potential to assist not only counsellors and wellbeing services but also university teachers and administrators to understand the sometimes profound and troubling issues being experienced by students and to better appreciate the underlying causes of student behaviour (cf. Maybin, 2007). In this regard, this study's data support Abdelmagid's (2013) and Bateman's (2017) findings that graffiti is an expressive mode of communication that subgroups with no other avenues of self-expression can resort to as a tool to talk about interests, value systems, emotional states, and preferences.

This paper both supports and contradicts the findings of other research studies. Our observation that women talk more about their feelings and emotions – for example, in relation to topics such as love affairs and marriage – corroborates Loewenstine, Ponticos, and Paludi's (1982) finding that female graffiti often contains "advice to the love-forlorn and [on] existential issues about life, marriage, and happiness" (p. 308). Similarly, our findings support studies by Dindia and Allen (1992), Goldsmith and Dun (1997), Green (2003), and Leong (2016) which revealed that female graffiti tends to disclose more personal information and express more emotion. They also support Trahan's (2011) claim that male graffiti is generally impassive and lacking in emotion when compared to female graffiti.

Other of our findings do *not* corroborate those of other studies. For example, we found little evidence to support Fitzpatrick, Mulac and Dindia's (1995) belief that females are more likely to ask questions through graffiti; indeed, asking questions or requiring information were not common motives behind the creation of graffiti. Furthermore, there were very few instances of sexual graffiti in our data, despite the widespread belief that sex is one of the most commonly occurring themes in graffiti. Where it does exist, findings have been mixed, with Bates and Martin (1980) claiming that sexual graffiti is more prevalent among females, Schreer and Strichartz (1997) that sexual graffiti tends to be more highlighted among males, and Otta et al. (1996) that there is no gender difference discernible and that in all-male and all-female locations sexual graffiti was rarely observed (just two cases of male graffiti and none of the female graffiti).

Graffiti offers an anonymous textual and pictorial medium through which to obtain insights into the way individuals see the world and the discursive tensions and motives underlying their actions, beliefs and self-perceptions. Since there are no explicit rules or protocols and because it is typically anonymous, producers of graffiti can express themselves without fear of social punishment or criticism. Graffiti allows individuals to communicate with others both personally (anonymity) and openly (no rules or punishments), and as such it can be argued that it offers a rhetorical form that affords equality to all who are interested to engage.

This study of gender, communicative motives and graffiti enriches the findings of previous research by providing a qualitative and quantitative analysis of Iranian student graffiti. Gender-specific motives for creating graffiti were discussed along with gendered language styles and communicative motives. The study helps build on our understanding of graffiti and will, we hope, encourage further research into context-specific communicative motives, psychological challenges and gender differences underlying this intriguing discursive practice. In particular, given that the current study focused on only two universities, we would encourage research that replicates it in other Iranian universities as well as universities in other countries. This latter focus would allow for a comparative perspective and promises to yield some interesting insights into cultural drivers/differences in the nature of graffiti in similar types of institutions internationally. Furthermore, research looking at the possible influence of other variables on the nature of graffiti, such as age and socioeconomic background, would be welcome and likely to give us a better understanding of graffiti and the factors that motivate its creation and content.

Statements and Declarations

Ethical approval: This article does not contain any studies with human participants or animals performed by any of the authors.

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References

- Abdelmagid, Y. (2013). The emergence of the Mona Lisa Battalions: Graffiti art networks in post-2011 Egypt. *Review of Middle East Studies*, 47(2), 172–182.
- Abel, E. L., & Buckley, B. E. (1977). *The handwriting on the wall: Toward a sociology and psychology of graffiti*. Greenwood.
- Adams, M. (2009). Slang: the people's poetry. Oxford University Press.
- Ahangar, A., & Shirvani, J. (2016). A sociolinguistic study of graffiti in university campus: The case study of Sistan and Baluchestan University. *Language Related Research*, 7(5), 175–198.
- Al-Khawaldeh, N. N., Khawaldeh, I., Bani-Khair, B., & Al-Khawaldeh, A. (2017). An exploration of graffiti on university's walls: A corpus-based discourse analysis study. *Indonesian Journal of Applied Linguistics*, 7(1), 29–42.
- Austin, J., (2002). Taking the train: How graffiti art became an urban crisis in New York City. Columbia University Press.
- Austin, J. (2016). From the city walls to 'Clean Trains': Graffiti in New York City, 1969-1990. In J. Ian Ross (Ed.) *Routledge handbook of graffiti and street art* (pp. 223-233). Routledge.
- Ball, D. (2020). The writing on the... desk: Desktop graffiti as unobtrusive measure of campus climate before and after the Virginia Tech massacre. *Deviant Behavior*, *41*(3), 366–377.
- Bateman, J. A. (2017). Triangulating transmediality: A multimodal semiotic framework relating media, modes and genres. *Discourse, Context & Media*, 20, 160–174.
- Bates, J. A., & Martin, M. (1980). The thematic content of graffiti as a nonreactive indicator of male and female attitudes. *The Journal of Sex Research*, *16*, 300–315.
- Blommaert, J. (2013). Citizenship, language, and superdiversity: Towards complexity. *Journal of Language, Identity & Education*, 12(3), 193–196.

- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101.
- Bruner, E. M., & Kelso, J. P. (1980). Gender differences in graffiti: A semiotic perspective. *Women's Studies International Quarterly*, 3(2-3), 239–252.
- Campbell, L. K., McMillen, H., & Svendsen, E. S. (2021). The written park: Reading multiple urban park subjectivities through signage, writing, and graffiti. *Space and Culture*, *24*(2), 276–294.
- Campos, R. (2013). Graffiti writer as superhero. *European Journal of Cultural Studies*, 16(2), 155–170.
- Castleman, C. (1982). Getting up: subway graffiti in New York. Mit Press.
- Dancygier, B., & Vandelanotte, L. (2017). Image-schematic scaffolding in textual and visual artefacts. *Journal of Pragmatics*, 122, 91–106.
- Debras, C. (2019). Political graffiti in May 2018 at Nanterre University: A linguistic ethnographic analysis. *Discourse & Society*, *30*(5), 441–464.
- Dindia, K., & Allen, M. (1992). Sex differences in self-disclosure: A meta-analysis. *Psychological Bulletin*, 112, 106–124
- Diniz, A. M. A., & Stafford, M. C. (2021). Graffiti and crime in Belo Horizonte, Brazil: The broken promises of broken windows theory. *Applied Geography*, 131, 102459.
- Divsalar, F., & Nemati, A. (2012). Social pathology of trust in car written manuscripts. *Mediterranean Journal of Social Sciences*, 3(3), 363–462.
- Eslamdoost, M., Beiranvand, M., & Hassanzadeh, A. (2019). Examination of graffiti in Ekbatan Town, Tehran. *Journal of Art Faculty Shahid Chamran University of Ahvaz*, 8(15), 42–61.
- Evered, K. T. (2019). Erasing the place of dissent: Inscriptions and eliminations of Gezi Park graffiti. *Area*, 51(1), 155–165.
- Farnia, M. (2014). A thematic analysis of graffiti on the university classroom walls-a case of Iran. International Journal of Applied Linguistics and English Literature, 3(3), 48–57.
- Ferris, F., & Banda, F. (2018). Recontextualisation and reappropriation of social and political discourses in toilet graffiti at the University of the Western Cape. *Stellenbosch Papers in Linguistics Plus*, 55, 27–45.
- Ferrell, J., (1997). Crimes of style: Urban graffiti and the politics of criminality. Garland.

- Fiorella, L. (2020). The science of habit and its implications for student learning and wellbeing. *Educational Psychology Review*, *32*, 603–625.
- Fitzpatrick, M. A., Mulac, A., & Dindia, K. (1995). Gender-preferential language use in spouse and stranger interaction. *Journal of Language and Social Psychology*, 14, 18–39.
- Fraser, B. (1980). Meta-graffiti. *Maledicta: The International Journal of Verbal Aggression, 4,* 258–260.
- Goldsmith, D. J., & Dun, S. A. (1997). Sex differences and similarities in the communication of social support. *Journal of Social and Personal Relationships*, *14*, 317–337.
- Gonos, G., Mulkern, V., & Poushinsky, N. (1976). Anonymous expression: A structural view of graffiti. *The Journal of American Folklore*, 89(351), 40–48.
- Green, J. A. (2003). The writing on the stall: Gender and graffiti. *Journal of Language and Social Psychology*, *22*(3), 282–296.
- Halliday, M. A. K. (1975). Learning how to mean. Edward Arnold.
- Halsey, M., & Young, A. (2002). The meanings of graffiti and municipal administration. *Australian & New Zealand Journal of Criminology*, 35(2), 165–186.
- Hanauer, D. I. (2011). The discursive construction of the separation wall at Abu Dis: Graffiti as political discourse. *Journal of Language and Politics*, *10*(3), 301–321.
- Hedegaard, M. (2014). Exploring tension and contradictions in youth's activity of painting graffiti. *Culture & Psychology*, 20(3), 387–403.
- Hefner, J., & Eisenberg, D. (2009). Social support and mental health among college students. *American Journal of Orthopsychiatry*, 79(4), 491–499.
- Jokar, S., Zandi, B., Rahmani, H., & Reza Gholi Famian, A. (2022). The study of girls' high school graffiti from the perspective of sociolinguistics. *Iranian Journal of Sociolinguistics*, 5(2). doi: 10.30473/il.2022.62639.1508
- Jorgenson, D. O., & Lange, C. (1975). Graffiti content as an index of political interest. *Perceptual* and Motor Skills, 40, 616–618.
- Khosravi, S. (2013). Graffiti in Tehran. Anthropology Now, 5(1), 1–17.
- Kousari, M. (2010). Graffiti in Iran: Between art and subculture. *Sociology of Art and Literature*, 2(1), 65–102.
- Lachmann, R. (1988). Graffiti as career and ideology. *American Journal of Sociology*, *94*(2), 229–250.

- Lapyai, S. (2003). Scratching protest: A study of graffiti as communication in universities in Thailand. <u>https://ro.ecu.edu.au/theses/1491</u>
- Leong, P. (2016). American graffiti: deconstructing gendered communication patterns in bathroom stalls. *Gender, Place & Culture, 23*(3), 306–327.
- Liang, M. Y. (2012). Reimagining communicative context: ELF interaction in Second Life to learn EFL. *Journal of Language, Identity & Education*, *11*(1), 16–34.
- Loewenstine, H. V., Ponticos, G. D., & Paludi, M. A. (1982). Sex differences in graffiti as a communication style. *Journal of Social Psychology*, *117*, 307–308.
- Mangeya, H. (2019). Graffiti as a site for cultural literacies in Zimbabwean urban high schools. *International Journal of Cultural Studies*, 22(3), 334–348.
- Maybin, J. (2007). Literacy under and over the desk: Oppositions and heterogeneity. *Language* and Education, 21(6), 515–530.
- Merrill, S. (2015). Keeping it real? Subcultural graffiti, street art, heritage and authenticity. *International Journal of Heritage Studies*, 21(4), 369–389.
- Mills, K. A., & Unsworth, L. (2018). The multimodal construction of race: A review of critical race theory research. *Language and Education*, *32*(4), 313–332.
- Mitzen, L. (2019). Art in action: An analysis of political graffiti in Washington DC. *Language*, *Discourse & Society*, 7(2), 123–155.
- Nihat Şad, N., & Kutlu, M. (2009). A study of graffiti in teacher education. *Eurasian Journal of Educational Research (EJER)*, 9(36), 39–56.
- Nwoye, O. G. (1993). Social issues on walls: Graffiti in university lavatories. *Discourse & Society*, 4(4), 419–442.
- Oganda, O. (2015). The language of graffiti on public transport vehicles in Kenya: Issues and perspectives. *International Journal of Education and Research*, *3*(6), 47–56.
- Otta, E., Santana, P. R., Lafraia, L. M., Hoshino, R. L., Teixeira, R. P., & Vallochi, S. L. (1996). Musa latrinalis: Gender differences in restroom graffiti. *Psychological Reports*, 78(3), 871–880.
- Ouaras, K. (2018). Tagging in Algeria: graffiti as aesthetic claim and protest. *The Journal of North African Studies*, *23*(1-2), 173–190.
- Parks, C. P. (1995). Gang behavior in the schools: Reality or myth?. *Educational Psychology Review*, 7(1), 41–68.

- Pietrosanti, S. (2010). Behind the tag: A journey with the graffiti writers of European walls. University of Amsterdam.
- Phua, V. C. (2020). Gendering graffiti in Brazil. Visual Studies, 35(2-3), 136-148.
- Read, A. W. (1935). *Lexical evidence from folk epigraphy in zuesiern North America, a glossarial study of the low element in the English language*. Olympic Press.
- Rodriguez, A., & Clair, R. P. (1999). Graffiti as communication: Exploring the discursive tensions of anonymous texts. *Southern Journal of Communication*, 65(1), 1–15.
- Schreer, G. E., & Strichartz, J. M. (1997). Private restroom graffiti: An analysis of controversial social issues on two college campuses. *Psychological Reports*, *81*(3), 1067–1074.
- Shariatpanah, S., Zandi, B., Pourebrahim, S., & Beyraghdar, R. (2022). Graffiti in the linguistic landscape of Kermanshah. *Language Related Research*, *13*(4), 531–568.
- Scheibel, D. (1994). Graffiti and 'Film School' culture: Displaying alienation. *Communication Monographs*, 61, 1–18.
- Sheivandi, L., Taghinezhad, A., Alishavandi, A., & Ranjbar, S. (2015). Exploring linguistic aspects in Iranians' graffiti. *Journal of Applied Linguistics and Language Research*, 2(5), 62–73.
- Stocker, T. L., Dutcher, L. W., Hargrove, S. M., & Cook, E. A. (1972). Social analysis of graffiti. *The Journal of American Folklore*, 85(338), 356–366.
- Swenson, E. (2018). Trace, revelation, and interpretant in archaeological research: The graffiti of Huaca Colorada, Peru. *Signs and Society*, *6*(2), 349–378.
- Trahan, A. (2011). Identity and ideology: The dialogic nature of latrinalia. *Internet Journal of Criminology*, 1–9.
- Vandelanotte, L., & Dancygier, B. (2017). Multimodal artefacts and the texture of viewpoint. *Journal of Pragmatics*, 122, 1–9.
- Vasilescu, A. (2016). Towards a "theory of everything" in human communication. In K. Allan, A. Capone, & I. Kecskes (Eds.), *Pragmemes and theories of language use: Perspectives in pragmatics, philosophy & psychology* (vol. 9) (pp. 305-322). Springer.
- Wang, D., Privitera, A. J., Jiang, Y., & Zai, Z. (2020). What does bathroom graffiti reveal about young adults in China? *Journal of Youth Studies*, 23(7), 945–958.
- Watzlawik, M. (2014). The "art" of identity development—Graffiti painters moving through time and space. *Culture & Psychology*, 20(3), 404–415.

- Wilson, J. Z. (2008). Pecking orders: Power relationships and gender in Australian prison graffiti. *Ethnography*, 9(1), 99–121.
- Zakareviciute, I. (2014). Reading revolution on the walls: Cairo graffiti as an emerging public sphere. *Hemispheres*, 29(4), 5–22.
- Zandi, B. (2014). A sociolinguistic study of graffiti in Tehran. *Quarterly of Social Studies and Research in Iran*, 3(2), 335–355.