

Graffiti and the Symbolic Representations of Drug and Psychoactive Substance Use in Urban Space: A Sociological Approach to the Murals of Skikda City

Received date:10/01/2026 Accepted date:23/04/2026 Published date:30/04/2026

Mecif Menouba¹

¹University of Guelma, Algeria,

Email: mecif.menouba@univ-guelma.dz

ORCID iD: <https://orcid.org/0000-0003-4683-8418>

Abstract:

This study investigates urban graffiti as a socio-semiotic form of informal youth expression in the city of Skikda, Algeria. It adopts a qualitative research design based on semiotic analysis and qualitative content analysis of a corpus of 748 photographic records of wall writings collected in 2021. The findings suggest that graffiti constitutes a structured visual discourse through which youth express identity-related concerns, social marginalization, and symbolic forms of communication linked to urban experience.

Rather than being interpreted as a random or purely deviant practice, graffiti appears as an alternative communicative system in which linguistic and visual codes are used to represent social realities. These inscriptions reflect multiple layers of meaning related to belonging, exclusion, and symbolic representation within urban space.

The study proposes that graffiti may offer interpretive insights into socio-cultural transformations in urban environments. However, these interpretations remain contextual and do not claim predictive or deterministic validity. The research highlights the need for further interdisciplinary studies to better understand the relationship between visual expression, youth identity, and urban space.

Keywords: graffiti, wall writings, psychoactive substances, addiction, symbolic resistance, urban sociology

Corresponding Author: Mecif Menouba, Email: mecif.menouba@univ-guelma.dz

Introduction

Graffiti, as a non-institutional form of visual expression, has become a significant component of contemporary urban communication. Beyond its aesthetic dimension, it operates as a symbolic system that conveys social tensions, identity negotiations, and emotional responses to urban life. This phenomenon is particularly visible in socially and economically fragile urban contexts, where traditional channels of expression are limited.

In Algeria, especially in coastal urban areas, graffiti has emerged as an informal visual language reflecting broader sociological transformations affecting youth. Urban walls increasingly display linguistic and visual symbols associated with social alienation, identity fragmentation, and collective frustration. These expressions transform public space into an alternative communicative arena beyond institutional control.

The city of Skikda provides a relevant case for examining this phenomenon due to its socio-spatial diversity and youth-dominated demographic structure. In this context, graffiti functions as a semiotic practice through which urban actors reinterpret their lived experiences and construct alternative meanings of belonging and exclusion.

From this perspective, graffiti should not be reduced to vandalism or aesthetic production, but rather understood as a socio-semiotic system embedded within urban culture. This study therefore aims to analyze graffiti as a symbolic discourse reflecting youth representations in public space.

Research Problem

In the context of ongoing socio-economic transformations in Algerian cities, urban space has increasingly become a site of informal symbolic production. Among these forms, graffiti has emerged as a visible medium of expression in several neighborhoods of Skikda,



often incorporating linguistic and visual codes related—directly or indirectly—to sensitive social issues, particularly psychoactive substance use.

This phenomenon raises a central analytical question regarding the symbolic function of graffiti in urban space and its role as an unofficial visual language through which youth express social distress, identity construction processes, and experiences of marginalization. It also raises questions about the extent to which these visual inscriptions reflect broader socio-cultural dynamics rather than individual or random acts.

Accordingly, this study is guided by the following research question:

To what extent do urban murals in Skikda represent symbolic expressions related to psychoactive substance culture, and how can graffiti be interpreted as an informal visual system encoding social meanings linked to protest, identity, and urban marginality?

Research Objectives

This study aims to achieve the following objectives:

1. To analyze the linguistic and visual symbols embedded in urban graffiti and interpret their socio-cultural meanings related to psychoactive substances and addiction.
2. To classify graffiti types according to their symbolic and semiotic characteristics within the urban context.
3. To construct a documented visual corpus of 748 graffiti samples for analytical purposes.
4. To explore graffiti as a parallel communicative system reflecting youth representations in urban space.

5. To provide an interpretive framework for understanding graffiti as an indicator of social and cultural transformation in urban environments.
6. To propose non-punitive approaches for interpreting graffiti within preventive and educational frameworks.

Study Terminology

Graffiti: Conceptual and Semiotic Definition

Graffiti represents one of the earliest forms of informal visual expression in public space. Historically, the term was introduced in the nineteenth century in relation to engraved wall inscriptions studied in archaeological contexts. Over time, graffiti has evolved into a contemporary urban phenomenon characterized by its symbolic, social, and communicative dimensions.

In contemporary urban studies, graffiti is understood as a form of unauthorized visual expression produced in public or semi-public spaces using various tools such as paint, markers, or engraving techniques. These inscriptions reflect social attitudes, cultural identities, and collective emotional states within urban environments.

For the purpose of this study, graffiti is defined as:

“All forms of visual and textual inscriptions produced on urban surfaces that express individual or collective meanings related to social identity, protest, cultural belonging, or symbolic representation within public space.”

Psychoactive Substances: Conceptual Framework

Psychoactive substances refer to chemical compounds that affect the central nervous system, leading to alterations in perception, mood, cognition, or behavior. These substances may be legally used for



medical purposes but can also be subject to misuse, resulting in dependency and behavioral risks (Wafi, 2023, p. 3).

They are generally classified into three main categories:

- Stimulants: increase neural activity and alertness
- Depressants: reduce nervous system activity and induce relaxation
- Hallucinogens: alter perception and sensory experience

Despite their therapeutic applications, the misuse of psychoactive substances among youth has become a significant social and public health concern (Farah & Ghellab, 2015, p. 54)

Pregabalin: Therapeutic Use and Misuse

Pregabalin is a pharmaceutical agent used in the treatment of neurological and psychological disorders, including epilepsy, neuropathic pain, and anxiety disorders (Dufau, 2020, p. 36). It functions by regulating neuronal excitability and reducing abnormal neural activity (Richard, Senon, & Valleur, 2009, p. 365).

However, recent studies indicate an increase in its non-medical use, particularly among youth populations, where it is sometimes consumed for its sedative or euphoric effects. This misuse has led to concerns regarding dependency, behavioral changes, and psychological risks.

These developments highlight the importance of stricter monitoring and awareness strategies regarding pharmaceutical substances with psychoactive effects.

Previous Studies

A considerable body of research has examined graffiti from sociological, anthropological, linguistic, and criminological perspectives. These studies generally converge on the idea that graffiti represents a form of symbolic expression linked to youth identity, urban marginality, and social tension.

Amar (2011) explored social perceptions of graffiti, emphasizing its relationship with symbolic violence and collective representations through association networks. Khnifa (2011) analyzed university graffiti as an expression of symbolic violence resulting from limited institutional channels of expression. Similarly, Bay (2019) examined graffiti in Tlemcen universities, highlighting its sociological and contextual dimensions.

Ziane (2019) interpreted graffiti as a manifestation of youth socialization crises, while Ouaras (2009) approached it as a linguistic system reflecting urban identity pluralism in Algiers. Bedjaoui (2019) emphasized its role in constructing emotional and collective urban identities, and Hamdi Si (2019) analyzed graffiti as a multidimensional discourse linking space, language, and power.

At the international level, Diniz and Stafford (2021) investigated graffiti in Brazil, focusing on its relation to urban crime and the “Broken Windows” theory, highlighting its contested role between disorder and social expression.

Compared to previous research, the present study focuses specifically on graffiti associated with psychoactive substances, particularly pharmaceutical drugs, which remains an underexplored dimension in the literature.

Critical Commentary on Previous Studies

The reviewed literature demonstrates a general agreement that graffiti functions as a symbolic indicator of youth expression, social tension, and marginal cultural production. However, most studies tend



to focus on themes such as symbolic violence, identity construction, or institutional marginality, with limited attention to the intersection between graffiti and psychoactive substance representation.

The present study extends this literature by introducing a socio-semiotic perspective that focuses on graffiti as a potential medium for encoding representations of psychoactive substances within urban space. This approach combines visual semiotics with sociological interpretations of deviance, contributing to a more nuanced understanding of urban symbolic production.

However, interpretations in this study remain exploratory and should not be understood as deterministic or universal claims about youth behavior.

Theoretical Framework

This study is grounded in an interdisciplinary theoretical framework combining sociological and semiotic perspectives:

1. Symbolic Interactionism (Blumer, 1969)

Symbolic Interactionism posits that meaning emerges through social interaction and shared symbolic systems. From this perspective, graffiti is understood as a form of symbolic communication through which individuals construct and negotiate meaning within urban environments.

Rather than being fixed, meanings embedded in graffiti are socially produced and continuously interpreted within specific cultural contexts.

2. Public Sphere Theory (Habermas, 1989)

Habermas' concept of the public sphere refers to spaces of communicative action where individuals express ideas outside institutional control.

In this framework, graffiti can be interpreted as an alternative or "counter-public" form of communication, enabling marginalized groups to express experiences of exclusion, protest, and identity negotiation within urban space.

3. Semiotic Theory (Barthes, 1977; Eco, 1976)

Semiotic theory emphasizes the layered nature of signs and symbols. According to Barthes, visual elements carry both denotative and connotative meanings, while Eco highlights the interpretive openness of visual systems.

Applied to graffiti, this approach allows for the analysis of linguistic and visual codes as structured sign systems that generate multiple meanings depending on social and cultural context.

4. Symbolic Violence (Bourdieu, 1993)

Bourdieu's concept of symbolic violence refers to the subtle forms of power embedded in symbolic systems. Graffiti may thus be interpreted as a form of counter-discourse through which marginalized groups symbolically resist dominant structures without direct confrontation.

3. Methodology

3.1. Research Design

This study adopts a qualitative research design based on semiotic analysis and qualitative content analysis. The aim is to interpret graffiti as a socio-symbolic practice within its natural urban



context, focusing on meanings embedded in visual and linguistic expressions related to psychoactive substances.

The methodological approach prioritizes contextual interpretation of visual data rather than causal explanation, allowing for an in-depth understanding of symbolic production in urban space.

3.2. Study Sample

The study relies on a purposive sample of 748 photographic records of graffiti collected from different neighborhoods of Skikda between June and December 2021.

The selection criteria focused on inscriptions containing explicit or implicit references to psychoactive substances or related symbolic expressions.

Skikda, as a socio-spatially diverse urban environment, provides a relevant context for analyzing youth visual expression shaped by economic and social inequalities.

3.3. Data Collection Instruments

The study employed the following tools:

- Direct field observation in urban spaces
- Systematic photographic documentation of graffiti
- Structured visual coding sheets for classification of symbols, colors, and linguistic elements

3.4. Data Collection Procedures

Data were analyzed using Qualitative Content Analysis (QCA) combined with semiotic interpretation. The analysis involved coding graffiti into thematic categories such as:

- Linguistic expressions
- Symbolic references
- Psychoactive substance indicators
- Protest-related messages
- Visual and aesthetic patterns

The aim was to identify recurring symbolic structures rather than quantify causal relationships.

3.5. Data Analysis

The collected visual data were analyzed using Qualitative Content Analysis (QCA). The images were systematically coded according to predefined thematic categories, including: (1) linguistic expressions, (2) symbolic codes, (3) references to drug-related culture, (4) protest-related messages, and (5) visual elements such as typography, color usage, and compositional features.

The analysis focused on identifying recurring patterns and semiotic structures within the graffiti corpus through a socio-semiotic interpretive approach. This involved examining the relationship between visual symbols, linguistic elements, and their urban contextual settings.

Attention was given to the contextual production of meanings within specific urban environments, allowing for an interpretive reading of how graffiti may reflect diverse forms of youth expression within public space.

Rather than attributing fixed or deterministic meanings, the analysis seeks to provide a contextual understanding of graffiti as a multi-layered visual discourse embedded in urban social life, where identity, protest, and lived experience are symbolically expressed.

Semiotic and Statistical Analysis of the Murals



Table (1): Symbols Related to Psychoactive Substances and Drugs

No.	Subtheme	Content of Symbols and Words	Frequency	Percentage (%)
1	Psychoactive Medications	BREG, LYRICA, PREGABALINE, GABA, TPS, LIRIKA...	235	31.42

Source: Prepared by the researcher

The data presented in Table (1) indicate that references to psychoactive substances constitute the most frequent category within the graffiti corpus, representing 31.42% of the total sample (N=748).

These inscriptions include names and abbreviations of pharmaceutical substances such as “Lyrica,” “Pregabalin,” and “GABA,” which appear repeatedly across different urban locations.

From a descriptive perspective, the recurrence of these references suggests that pharmaceutical terminology has become part of the visual repertoire used in urban graffiti. These elements may reflect symbolic appropriations of medical language within informal youth expression.

Rather than indicating direct behavioral implications, such inscriptions should be understood as part of broader processes of visual communication and cultural coding in urban space.

Figure 1: Symbols and words associated with psychoactive substances



Source: Photographed by the researcher

The photographic material associated with Figure (1) provides a visual illustration of the findings presented in Table (1). The images include recurring visual motifs such as pills, hearts, heartbeat lines, fragmented facial forms, and skeletal representations.

From a semiotic perspective, these elements may be interpreted as part of a broader visual vocabulary associated with bodily representation. They reflect diverse forms of visual expression within urban space, where meaning is constructed through symbolic and aesthetic elements.

The repetition of specific terms such as “GABA” or “TPS” suggests the presence of shared visual references within certain social contexts. However, these should be understood as contextual symbolic forms rather than fixed or uniform codes.

Color usage, particularly red and black, contributes to the visual structure of the graffiti, enhancing contrast and visibility. These elements function primarily as stylistic and expressive features within the urban visual environment.

Table (2): Social and Cultural Symbols in Graffiti

No	Subtheme	Content of Symbols and Words	Frequency	Percentage (%)
2	Expressive Slogans	<i>El-Harga</i> (illegal migration) – Hatred – M.R – MAT – SCC	206	27.54
3	Television and Cultural Symbols	<i>Çukur</i> – <i>Kayi</i> emblem – Symbols from Turkish TV series	101	13.50
4	Sports Symbols	<i>USMA</i> – <i>JSMS</i> – Numbers and athletic symbols	81	10.83

Source: Prepared by the researcher

The data in Table (2) show that social and cultural symbols represent a substantial component of the graffiti corpus. These symbols include expressive slogans, references to television series, cultural emblems, and sports-related identifiers.

Overall, the findings indicate that graffiti incorporates a wide range of visual references drawn from both local and global cultural contexts. Expressive slogans may reflect forms of social sentiment related to migration, frustration, or identity expression within urban space.

Cultural references such as television series (*Çukur*) and symbolic emblems (*Kayi*) suggest processes of cultural appropriation,

where global visual elements are recontextualized in local settings. Sports symbols reflect forms of group affiliation and identity expression.

Figure 2: Social and cultural symbols in the murals



Source: Photographed by the researcher

Figure (2) illustrates the visual diversity of social and cultural graffiti in Skikda. The images show variations in typography, color usage, and symbolic references.

From a descriptive perspective, graffiti integrates multiple cultural and visual elements, including media references and sports symbols. These elements are visually adapted within local urban contexts, reflecting processes of cultural recontextualization.

Table (3): Symbols of Violence, Advertisements, and Marginal Content

No	Subtheme	Content of Symbols and Words	Frequency	Percentage (%)
5	Anti-police Symbols	ACAB – 1312 – Nazi symbols – USC 13 – Anti-police slogans	46	6.15
6	Advertisements	“Sheep for sale” – Promotional phrases – Red and blue marketing colors	11	1.47
7	Aesthetic/Natural Graffiti	Nature drawings – Flowers – Landscape imagery	9	1.20
8	Marginal Sexual Content	Names of pornographic websites	3	0.40

Source: Prepared by the researcher

Table (3) presents different categories of graffiti, including anti-authority symbols, commercial elements, aesthetic forms, and marginal content.

Anti-authority symbols (e.g., ACAB, 1312) indicate the presence of oppositional visual expressions within urban space. Commercial and advertising elements suggest the coexistence of market-related visual codes alongside informal expression.

Aesthetic and decorative motifs contribute to visual diversity, while marginal content appears in limited frequency and should be interpreted within its specific context.

Overall, the data reflect the heterogeneous nature of graffiti as a visual system composed of multiple symbolic registers.

Figure 3: Symbols of violence and advertisements



Source: Photographed by the researcher

Figure (3) presents a combination of protest symbols, commercial elements, aesthetic designs, and marginal inscriptions within the same urban environment.

The visual composition reflects the coexistence of different symbolic forms rather than a unified system. Protest symbols such as ACAB and 1312 are visually prominent, while commercial and decorative elements appear alongside them.

This diversity suggests that graffiti in Skikda functions as a multi-layered visual field characterized by overlapping expressive forms.

Discussion of the Results: The Semiotic Analysis of Graffiti Symbols in Skikda



The findings suggest that graffiti in Skikda operates as a complex socio-semiotic system rather than a random visual practice. It reflects multiple layers of meaning related to identity, social belonging, and urban experience.

The prominence of psychoactive-related symbols should be understood as part of a broader cultural process in which pharmaceutical references become integrated into youth symbolic communication. However, these findings should not be interpreted as direct indicators of behavioral causation or addiction patterns.

Graffiti also functions as an alternative communicative space where marginalized youth express social and emotional experiences outside institutional frameworks. This aligns with symbolic interactionist and public sphere perspectives, which emphasize meaning-making through social and visual interaction.

Overall, the results highlight the need for cautious interpretation of urban graffiti, avoiding overgeneralization or deterministic conclusions.

Conclusion

This study has examined graffiti in Skikda as a socio-semiotic form of urban expression based on a qualitative analysis of 748 visual samples. The findings indicate that graffiti functions as an alternative communicative system through which youth articulate symbolic representations of identity, social experience, and urban marginality.

The study demonstrates that graffiti should not be reduced to deviant behavior or aesthetic production, but rather understood as a complex cultural and communicative phenomenon embedded within urban life.

However, the interpretations presented remain context-specific and exploratory, and cannot be generalized beyond the studied environment. Further interdisciplinary research is needed to deepen understanding of urban visual expression and its socio-cultural implications.

Recommendations

1. Establish urban research observatories to monitor graffiti as a socio-cultural phenomenon.
2. Promote interdisciplinary studies combining sociology, semiotics, and urban studies.
3. Encourage non-punitive approaches to graffiti analysis within urban policy frameworks.
4. Integrate visual literacy programs in educational and preventive initiatives.
5. Support participatory urban art projects involving youth and local institutions.
6. Develop contextual analytical frameworks rather than generalized interpretive models for graffiti studies.

References

1. English References

- **Barthes, Roland.** (1977). *Image, Music, Text*. London : Fontana Press.
- **Bourdieu, P.** (1993). *The Field of Cultural Production*. Columbia University Press.
- **Blumer, Herbert.** (1969). *Symbolic Interactionism: Perspective and Method*. Englewood Cliffs, NJ : Prentice-Hall.
- **Diniz, Alexandre Magno Alves, & Stafford, Mark C.** (2021). Graffiti and crime in Belo Horizonte: The broken windows theory revisited. *Brazilian Journal of Criminology*.



- **Dufau, Mylis.** (2020). Addictions aux médicaments psychotropes. Paris : Presses de l'École des Hautes Études en Santé Publique.
- **Eco, Umberto.** (1976). A Theory of Semiotics. Bloomington, IN: Indiana University Press.
- **Fransberg, Miia Maria, Myllylä, Laura, & Tolonen, Jari.** (2021). Graffiti and street art: Creative practices in urban spaces. *International Journal of Cultural Studies*, 24(3), 359–374.
- **Garrucci, Raphaël.** (1854). Graffiti de Pompéi : Inscriptions gravées au trait. Rome : Imprimerie Pontificale.
- **Habermas, Jürgen.** (1989). The Structural Transformation of the Public Sphere: An Inquiry into a Category of Bourgeois Society. Cambridge, MA : MIT Press.
- **Ouaras, Karim.** (2009). La ville d'Alger : Murs en paroles. Alger : INALCO.
- **Richard, Denis, Senon, Jean-Sénon, & Valleur, Marc.** (2009). Les conduites addictives. Paris : Éditions Masson.

2. Arabic References

- **Amar, Nawal.** (2011). A study of social perceptions of wall writings in Algerian society. University of Algiers.
- **Amar, Nawal.** (2020). Graffiti as a cultural representation between aesthetic expression and symbolic protest. *Journal of Human and Social Sciences*, 12(2), 81–94.
- **Al-Badaineh, Dhiab Mousa.** (2012). Drugs and psychoactive substances: A study in criminal sociology. Amman : Dar Wael for Publishing and Distribution.
- **Bay, Abdelkader.** (2019). The reality of graffiti in Algerian university spaces: The case of Tlemcen University. *Journal of Social Sciences*.
- **Bedjaoui, Wafaa.** (2019). Graffiti and urban identities in popular neighborhoods in Algeria. University of Oran.



- **Demirdash, Adel.** (1982). The psychology of addiction and drugs. Cairo : Dar Al-Fikr Al-Arabi.
- **Rouabda, Abdelraouf.** (1988). Crimes related to narcotics. Amman: Dar Al-Thaqafa for Publishing.
- **Zian, Mohammed.** (2019). Graffiti and eroticism between repression and freedom: An anthropological study in the urban milieu.
- **Abdelrahman, Ali Ismail.** (2006). Criminal psychology. Cairo : Dar Al-Nahda Al-Arabiya.
- **Farah, Belkacem, & Ghellab, Tarek.** (2015). Crimes of using psychoactive substances in Algerian law. Journal of Legal Studies, (4), 50–66.
- **Khnifa, Malika.** (2011). Writings in the university environment: A sociological study. University of Oum El Bouaghi.
- **Mecif, Menouba.** (2024). Analysis of wall writings as a medium for promoting and using psychoactive substances in Algeria: The case of Skikda graffiti. Arab Journal for Security Studies, 40(1).
- **Si Hamdi, Nacer.** (2019). Graffiti in Tizi Ouzou : A plural discursive space. University of Tizi Ouzou.
- **Wafi, Khadija.** (2023). Psychoactive substances under Algerian legislation and the 1971 Convention. Master's Thesis, University of Constantine.



