

A REVIEW OF GRAFFITI AS A VISUAL COMMUNICATION FORM: BIBLIOMETRIC ANALYSIS AND VISUALIZATION

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| ARTICLE INFO | ABSTRACT |
|---|---|
| Article history: | Currently, the presence of graffiti has existed in every corner of urban |
| Received: 12 December 2022 Revised: 13 February 2023 | space in Indonesia. Its presence makes it one of the popular arts that |
| Accepted: 24 February 2023 | applies a variety of visual elements as a medium of visual |
| Keywords: | communication. Graffiti research itself in Indonesia is still very |
| graffiti | minimal. Especially those that focus on mapping research trends with |
| visual communication form | the topic of graffiti as a visual communication form. Thus, this |
| bibliometric | research was conducted to examine trends with graffiti as a visual |
| analysis visualization | communication form. The analysis method used in this study was |
| visialization | bibliometric analysis. The data used in this study was based on the |
| | Scopus database. The results found there are the research trends tend |
| | to be dynamic from 2009 until 2022. |
| | Based on the visualization results, it was found that the topic of |
| | graffiti as a visual communication form formed a network that was |
| | divided into 5 clusters, namely Red, Green, Blue, Yellow, and Purple |
| | clusters. From this network, co-occurrence is found based on |
| | keywords, titles, and abstracts where the theme of discussion with the |
| | largest node is art. From the results of this visualization, it was found |
| | that the topic of graffiti as a visual communication form still has an |
| | opportunity to be discussed in others themes outside of existing items. |

1. INTRODUCTION

Communication is the process of exchanging information to provide a certain understanding between living beings. The process of understanding is carried out both verbally and non-verbally

through symbols that can be understood along with their meanings. One of the communication methods used by humans is visual communication (Ibrahim et al., 2012). Visual communication is a form of conveying nonverbal messages in a factual sense that utilizes visual elements such as shape, color, composition, symbols, and others (Amin, 2021). This was the first form of communication that humans used. Symbols on cave walls or stones became a way for humans to communicate with their communities (Istanto, 2000). Although it is fairly ancient, this visual communication activity is still going on today, one of them is graffiti.

Graffiti is the plural of the Italian word "graffito" meaning scratch or stroke. Graffiti is used as a term for writing or drawing that is crossed out, scratched, painted, or inscribed on the wall. Furthermore, graffiti becomes a form of expression of public signs in the form of words written in simple or vulgar (Susanto, 2011). Graffiti has various types of shapes including tagging, throw-ups, pieces, and roll-ups. Tag or tagging is a line that is crossed out in public spaces and serves as a "signature" for graffiti artists. The tags are the simplest form of the existing type of graffiti. Throw-ups are a two-dimensional form of graffiti work with contour lines and fill-in them. Throw-ups themselves are also known as "bubbles" because their dominant shape is inflated like balloons. Throw-ups become simple executions for graffiti works that are more interesting compared to tags. Pieces are a type of 3D graffiti. 3D pieces are produced through a combination of color and shape transitions to cause a certain dimensional effect on the work. Pieces become a complex type of graffiti of tags and throw-ups. This is because pieces are created from various combinations of ideas and certain skills possessed by graffiti artists (Sjostrand et al., 2014). Roll-ups are a type of graffiti that uses paint rollers and paint on wall surfaces. Roll-ups are often found on high walls that cannot be touched (Labonte, 2003).

In Indonesia itself, graffiti is found in many public spaces, especially on city street walls. Therefore, graffiti is also known as street art or urban art. The growing stigma is graffiti as a form of vandalism. However, along with its popularity, graffiti began to be accepted as a work of art because of the visual elements used and as a form of expression presented through these visual elements. Furthermore, graffiti is also considered a visual communication medium used to convey certain information.

This is as stated by Rini Yuniar in his research which revealed that graffiti is a medium of political communication for urbanites. Graffiti practitioners as critical performers have a high awareness of urban situations so they use visual communication media in the form of graffiti as a way of expressing these conditions (Yuniar, 2017). Another study was conducted by Nurul Haniza. In his research, he revealed that graffiti is a form of communication and self-existence of graffiti

practitioners through symbols with certain messages and meanings so that the existing identity of the graffiti perpetrator can be known to the public (Haniza, 2019). Research on the existence of graffiti as a medium of expression of adolescent subculture has also been carried out previously by Trillian Kurniasari, et al. In his research, he revealed that because visual forms have long durability values and can convey clear information, graffiti is used as a form of visual communication by graffiti actors (Kurniasari et al., 2013).

Based on previous research, it was found that the graffiti research that has been carried out departs from the function of graffiti as a visual communication medium, especially in Indonesia. However, research that specifically examines research trends on the topic of graffiti as a visual communication form has never been done before. For this reason, research is needed that focuses on discussing research trends with the topic of graffiti as a visual communication form. Thus this research does is examine research trends with the topic of graffiti as a visual communication form globally not only in Indonesia. So that *a research gap* is found that can be an opportunity for further research.

This study uses bibliometrics to analyze and visualize the literature related to the topic of graffiti as a visual communication form. The research questions related to the topic of graffiti as a visual communication form in this study include: (1) How is the development of literature publications?; (2) Who is the most author and publications?; (3) Which country produces the most publications?; (4) Which affiliate produces the most publications?; (5) What are the most publications cited?; (6) What future recommendations can be made with this development?

2. METHOD

The method used in this study is bibliometric analysis. Bibliometric is a type of research with qualitative and quantitative evaluation (Pritchard, 1969). In bibliometric analysis, there are at least four processes that must be carried out including (1) identifying database and keywords search; (2) Produce preliminary data analysis; (3) Display network analysis; (4) Produce thematic and conceptual analysis; Bibliometric itself is conceptually based on the results of the analysis of publications that have been published and cited (Wamba et al., 2017). The foundation of bibliometric analysis is based on the results of reliable citation indicators from published papers or specific study areas (Rejeb et al., 2022).

The data used in this study is based on the Scopus database. This is because Scopus is a database that has a global reputation (Burnham, 2006). The keywords "graffiti as a visual communication

form" are included in the title, abstract, and keyword search. From these keywords found 17 documents. This data is then extracted into metadata for visualization.

3. RESULTS

The research topic of graffiti as a visual communication form on the Scopus database shows that the topic has existed from 2009 to 2022. The number of documents related to the topic was 17 documents throughout the period. The trend looks dynamic from 2009 which was initially only 1 document then increased significantly in 2014 with 3 documents. However, this number tends to drop dramatically in 2019 in the absence of research documents related to the topic. Began to stagnate until 2022 with the number of 1 document every year (Table 1 and Figure 1).

| Year | Total Documents | Year | Total Documents |
|------|-----------------|------|-----------------|
| 2009 | 1 | 2016 | 2 |
| 2010 | 1 | 2017 | 3 |
| 2011 | 1 | 2018 | 1 |
| 2012 | 0 | 2019 | 0 |
| 2013 | 0 | 2020 | 1 |
| 2014 | 3 | 2021 | 1 |
| 2015 | 2 | 2022 | 1 |

Table 1. The trend of publications per year from 2009 until 2022

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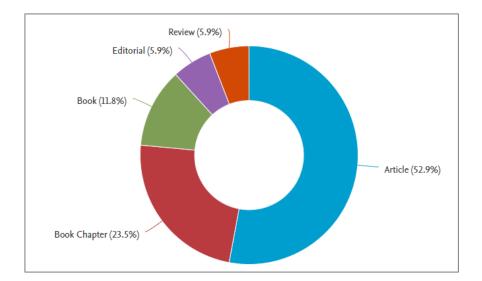
Source: Scopus, 2023

Figure 1. The trend of publications per year from 2009 until 2022. Source: Scopus, 2023

Documents in the article type dominate the existing document types, namely 52.9% or 9 documents. Followed by book chapters 23.5% and books 11.8% (Table 2 and Figure 2). Meanwhile, there are only 9 publications with 5 publications sources with the dominant publication sources for the topic graffiti as a visual communication form. In the first place, there is Street Art and Urban Creativity with a total of 2 documents. In second place is African Affairs with 1 document. In third place is Arte Individuo Y Sociedad with 1 document. In fourth place is Disegnarecon with 1 document. In fifth place, there is Interactions with 1 document. This amount is an accumulation of total documents based on related topics from 2009 to 2022 (Table 3 and Figure 3).

| Total Documents |
|-----------------|
| 9 |
| 4 |
| 2 |
| 1 |
| 1 |
| |

Table 2. The type of documents published from 2009 until 2022



Source: Scopus, 2023

Figure 2. The type of documents published from 2009 until 2022 Source: Scopus, 2023

| Source | Total Documents |
|--|-----------------|
| Street Art And Urban Creativity | 9 |
| African Affairs | 4 |
| Arte Individuo Y Sociedad | 2 |
| Disegarecon | 1 |
| Interactions | 1 |
| Journal Of Preventive Medicine And Hygiene | 1 |
| Qualitative Research Reports In Communication | 1 |
| Romanoarabica | 1 |
| Societes | 1 |

Table 3. The top 9 sources of publications from 2009 until 2022

Source: Scopus, 2023

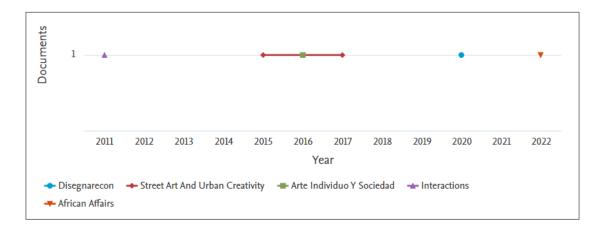


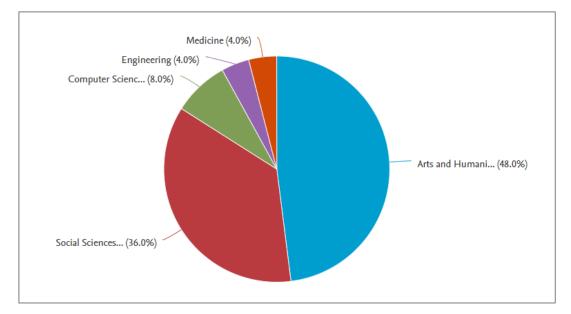
Figure 3. The top 5 sources of publications from 2009 until 2022 Source: Scopus, 2023

The topic of graffiti as a visual communication form is predominantly discussed in the arts and humanities area subject which is 48.0% with 12 documents. Meanwhile, 36.0% or 9 documents were discussed in the subject area of social sciences. And the rest on other area subjects (Table 4 and Figure 4). Related to the subject area, affiliates with the amount of topic-related research have 5 dominant affiliations. In the first place of the National Psoriasis Foundation with 1 document. In second place Portigal Consulting with 1 document. In third place Mercer Country College with 1 document. In fourth place Diplômé de l'École du Louvre with 1 document. And finally in fifth place Luigi Vagnetti with 1 document (Table 5 and Figure 5). Concerning the country that produces the most research on the topic of graffiti as a visual communication form there are 5 dominant countries. The first country is the United States with 5 documents. The second country is the United Kingdom with 4 documents. The third country is Italy with 2 documents. The fourth

country is Australia with 1 document. The fifth country is Colombia with 1 document (Table 6 and Figure 6).

| Total Documents |
|-----------------|
| 12 |
| 9 |
| 2 |
| 1 |
| 1 |
| |

| Table 4. | The top 5 | subject a | reas of | publications | from 2009 | until 2022 |
|----------|-----------|-----------|---------|--------------|-----------|------------|
|----------|-----------|-----------|---------|--------------|-----------|------------|



Source: Scopus, 2023

Figure 4. The top 5 subject areas of publications from 2009 until 2022 Source: Scopus, 2023

| Subject Area | Total Documents |
|-------------------------------|-----------------|
| National Psoriasis Foundation | 1 |
| Portigal Consulting | 1 |
| Mercer Country College | 1 |
| Diplômé de l'École du Louvre | 1 |
| Luigi Vagnetti | 1 |

| Table 5. The top | 10 affiliations | of publications | from 2009 | until 2022 |
|---------------------|-----------------|-----------------|-------------|------------|
| 1 uole 5. 1 lie top | 10 unnunons | or publications | 110111 2007 | |

| Azienda Sanitaria Universitaria Giuliano Isontina | 1 |
|--|---|
| Universitatea din Bucuresti | 1 |
| London Metropolitan University | 1 |
| Università di Parma | 1 |
| Ohio University | 1 |



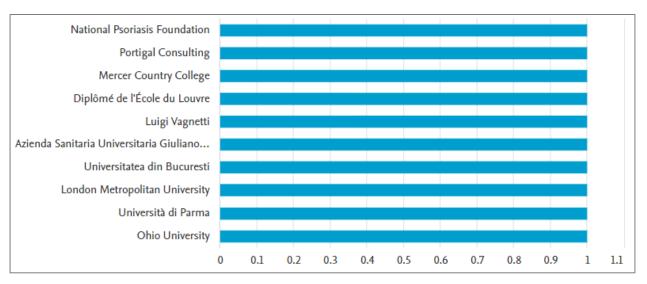


Table 5. The top 10 affiliations of publications from 2009 until 2022 Source: Scopus, 202

| Table 6. The top 10 countries of | publications from 2009 until 2022 |
|----------------------------------|-----------------------------------|
|----------------------------------|-----------------------------------|

| Country | Total Documents |
|----------------|-----------------|
| United States | 5 |
| United Kingdom | 4 |
| Italy | 2 |
| Australia | 1 |
| Colombia | 1 |
| France | 1 |
| Germany | 1 |
| Portugal | 1 |

| Romania | 1 |
|---------|---|
| Sweden | 1 |

Source: Scopus, 2023

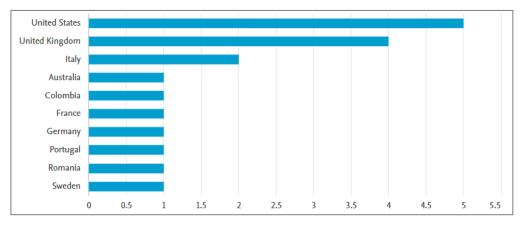


Figure 6. The top 10 countries of publications from 2009 until 2022 Source: Scopus, 2023

The productivity of research on the topic of graffiti as a visual communication form can also be seen based on the dominant keywords used. In this topic, the dominant keywords used are "graffiti", "history", "street art", and "visual communication" (Figure 7). Based on these keywords, 10 documents with the highest number of citations were found (Table 7).

| | graffiti | |
|-----------------|------------|---------------------------------|
| | | |
| | | visual communication history |
| | | |
| state vosviewer | street art | |

Figure 7. The top keywords of publications from 2009 until 2022 Source: Scopus, 2023

| No. | Document | Year | Source | Cited by |
|-----|--|------|--|----------|
| 1. | "Graffiti in antiquity" (Keegan, 2014) | 2014 | "Graffiti in Antiquity" pp. 1-329 | 44 |
| 2. | "A nation of politicians: Gender, patriotism, and political culture in late eighteenth-century Ireland" (Higgins, 2010) | 2010 | "A nation of politicians: Gender, patriotism, and political culture in late eighteenth- century Ireland" pp. 1-333 | 24 |
| 3. | "Longitudinal photo-documentation: Recording living walls" (Hansen & Flynn, 2015) | 2015 | "Street Art and Urban Creativity" 1(1), pp. 26-31 | 11 |
| 4. | "Participatory graffiti as invitational rhetoric: The case of a machismo" (Bates, 2017) | 2017 | "Qualitative Research Reports in Communication" 18(1), pp. 64-72 | 5 |
| 5. | "Bogota urban art to graffiti. Between illegality and artistic form of expression" (Gama-Castro & León-Reyes, 2016) | 2016 | "Arte, Individuo y Sociedad" 28(2), pp. 355-369 | 5 |
| 6. | "Introduction: Viewing inscriptions" (Eastmond, 2015) | 2015 | "Viewing Inscriptions in the Late Antique and Medieval World" pp. 1-9 | 5 |
| 7. | "Language and translation in film" (Baños & Díaz-Cintas, 2017) | 2017 | "The Routledge Handbook of Translation Studies in Linguistics" pp. 313-326 | 4 |
| 8. | Cairo's new colors: Rethinking identity in the graffiti of the Egyptian revolution (Nicoarea, 2014) | 2014 | "RomanoArabica" 11, pp. 247-262 | 4 |
| 9. | "COVID-19 and Spanish flu-18: a review of medical and social | 2021 | "Journal of Preventive Medicine | 3 |

Table 7. The top 10 cited publications from 2009 until 2022

| | parallelisms between two global | | and Hygiene", 62(3), | |
|-----------------------------|---------------------------------------|------|----------------------|---|
| pandemics" (Craveiro, 2017) | | | pp. E613-E620 | |
| 10. | "The influence of graffiti writing in | 2017 | "Street Art and | 2 |
| | contemporary typography" | | Urban Creativity", | |
| | | | 3(2), pp. 65-83 | |

Source: Scopus, 2023

On topics related to graffiti as a visual communication form, there are no authors with more than 1 number of documents. However, 10 authors include publication documents related to the topics (Table 8). From these 10 authors, a co-authorship network was formed between Armocida and other authors (Figure 8).

Author **Total Documents** Armocida, E.1 1 Bates, B.R.1 1 Baños, R.1 1 Billereau, S.1 1 1 Burström, M.1 Craveiro, R.P.C.d.A.1 1 Di Luggo, A.1 1 1 Duthely, R.1 Díaz-Cintas, J.1 1 Eastmond, A.1 1

Table 8. The top 10 authors of publications from 2009 until 2022

Source: Scopus, 2023

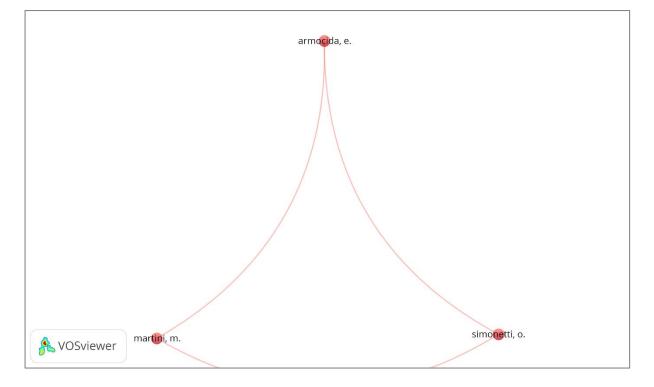


Figure 8. Co-authorships of publications related to the topic Source: Scopus, 2023

Based on the research development map on the topic of graffiti as a visual communication form visualized related co-occurrences. From the visualization results, it appears that this topic has 5 clusters divided into red, green, blue, yellow, and purple clusters (Table 9 and Figure 9). The discussion around graffiti as "art" has a large node followed by the "street art" and "translation" nodes. This can be interpreted to mean that the discussions contained in this cluster have been discussed quite a lot. Meanwhile, based on its development, this topic started from the theme of "public art" which then developed until now with the theme of "pandemic" and "misinformation".

| Clusters | Items |
|----------------|---|
| Red clusters | art, city, covid, issue, pandemic, politic, review, Spanish flu, time |
| Green clusters | the audience, audiovisual material, avt, chapter, film, mode, practice, |

| | translation, wide range |
|-----------------|---|
| Blue clusters | hip hop, ireland, mean, nation, politician, study, word |
| Yellow clusters | analysis, article, longitudinal photo document, machismo, street art, understanding |
| Purple clusters | graffiti art, hiv aids, misinformation, paper, public art, south africa |

Source: VosViewer, 2023

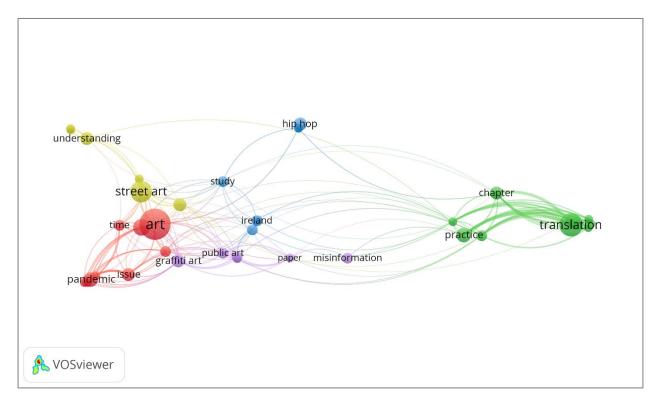


Figure 9. Network visualization of co-occurrence related to the topic Source: VosViewer, 2023

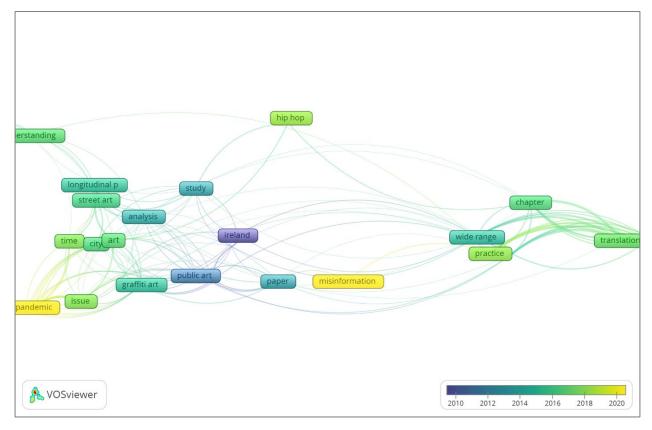


Figure 10. Overlay visualization of co-occurrence related to the topic Source: VosViewer, 2023

4. CONCLUSION

This research departs from the question: (1) How is the development of literature publications?; (2) Who is the most author and publications?; (3) Which country produces the most publications?; (4) Which affiliation produces the most publications?; (5) What are the most publications cited?; (6) What future recommendations can be made with this development?; Thus from the results of this study it was found that research related to the topic of graffiti as a visual communication form based on the Scopus database has existed from 2009 to 2022. The research trends tend to be dynamic. Where 2014 and 2017 became the year with the highest number of documents, namely 3 documents each. This number continues to grow compared to previous years. Meanwhile, from 2017 to 2022, discussions related to the topic of graffiti as a visual communication form decreased. Publication documents were dominated in the form of articles, which is 52.9% or 9 documents. The publication source with the highest number of documents is Street Art and Urban Creativity with 2 documents. The subject matter of the discussion area is dominated in the Arts and Humanities area by 48% or 12 documents. The affiliation with related publications is occupied by the National Psoriasis Foundation and the country with the highest number of document is "Graffiti in antiquity"

with a total of 44 citations. A prolific author is Armocida who has a co-authorship network with other authors.

Based on the visualization results, it was found that the topic of graffiti as a visual communication form formed a network that was divided into 5 clusters, namely Red, Green, Blue, Yellow, and Purple clusters. From this network, co-occurrence is found based on keywords, titles, and abstracts where the theme of discussion with the largest node is art. From the results of this visualization, it was found that the topic of graffiti as a visual communication form still has a chance of discussion with themes outside of existing items.

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