Public art as a driver of change: exploring its socio-political impact in the modern era

Публічне мистецтво як рушійна сила змін: дослідження його соціально-політичного впливу в сучасну епоху

Written by:
Olga Galchynska[1]

https://orcid.org/0000-0002-3030-6911

Liudomyr Filonenko[2]

https://orcid.org/0000-0003-0965-9832

Rosslan Lozev[3]

https://orcid.org/0009-0005-2254-3393

Mykhailo Sydor[4]

https://orcid.org/0000-0003-1616-6075

Valentyna Drotenko[5]

https://orcid.org/0000-0002-6582-652X

Abstract

This article explores the socio-political impact of public art installations. It interprets impact indicators, describes public art as a result of socio-political transformations, reveals the characteristics of national identity through public art, studies public art during war, and compares the symbolism of public art installations across different countries. The research employed a descriptive methodology, including literature analysis, visual and document analysis, theoretical assessment of impact indicators, historical and comparative analysis, and content analysis. The findings demonstrate that public art is a crucial cultural phenomenon that shapes collective memory, national identity, and cultural heritage.

Анотація

У статті досліджено соціально-політичний вплив публічних арт-інсталяцій. Він інтерпретує індикатори впливу, описує паблік-арт як результат соціально-політичних трансформацій, розкриває характеристики національної ідентичності через паблік-арт, вивчає паблік-арт під час війни та порівнює символіку публічних арт-інсталяцій у різних країнах. Для здійснення дослідження використано описові методи, у тому числі аналіз літератури, візуальний аналіз і аналіз документів, теоретичну оцінку показників впливу, історичний і порівняльний аналіз, а також аналіз контенту. Результати демонструють, що публічне мистецтво є

[1] PhD in Design, Associate Professor, Department of Graphic Design, Faculty of Design, Mykhailo Boichuk Kyiv State Academy of Decorative Applied Arts and Design, Kyiv, Ukraine. WoS Researcher ID: HTP-9668-2023

[2] PhD in Pedagogical Sciences, Associate Professor, Department of Music-Theoretical Disciplines and Instrumental Training, Faculty of Primary Education and Art, Drohobych Ivan Franko State Pedagogical University, Drohobych, Ukraine. WoS Researcher ID: KIB-7674-2024

[3] PhD, Assistant Professor, Department of Design, New Bulgarian University, Sofia, Bulgaria. WoS Researcher ID: KOD-7642-2024

[4] PhD in Art History, Associate Professor, Department of Vocal and Choral, Choreographic and Fine Arts, Faculty of Primary Education and Arts, Drohobych Ivan Franko State Pedagogical University, Drohobych, Ukraine. WoS Researcher ID: KFQ-5970-2024

[5] PhD, Associate Professor of the Department of Philosophy, Institute of the Humanities and Social Sciences, Lviv Polytechnic National University, Lviv, Ukraine; Department of Philosophy, Sociology and Political Science named after Prof. Valeriy Skonyi, Faculty of History, Pedagogy and Psychology, Drohobych Ivan Franko State Pedagogical University, Drohobych, Ukraine. WoS Researcher ID: KFQ-1313-2024

The study identifies various types of public art and highlights the growing popularity of digital and multimedia art. It also distinguishes impact indicators of public art installations and proves that public art plays a vital role in stimulating socio-political transformations, shaping cultural identity, advocating for positive change, increasing civic engagement, and addressing social justice issues. The research emphasizes the short-term and long-term effects of public art installations and pays special attention to their role during wartime.

Keywords: artworks, challenges, community, impact indicators, urban environment.

вирішальним культурним феноменом, який формує колективну пам'ять, національну ідентичність і культурну спадщину. Дослідження визначає різні типи публічного мистецтва та підкреслює зростаючу популярність цифрового та мультимедійного мистецтва. У статті виокремлено індикатори впливу публічних арт-інсталяцій і доведено, що публічне мистецтво відіграє важливу роль у стимулюванні соціально-політичних трансформацій, формуванні культурної ідентичності, пропагуванні позитивних змін, підвищенні громадянської активності та вирішенні питань соціальної справедливості. Дослідження наголошує на короткостроковому та довгостроковому впливах публічних арт-інсталяцій і приділяє особливу увагу їх ролі під час війни.

Ключові слова: твори мистецтва, виклики, суспільство, показники впливу, міське середовище.

Introduction

The modern era is associated with significant transformations in various aspects of human existence and marked by industrialization, fostering urbanization and new labor dynamics (Rudenko & Kharkov, 2023). Technological advancements, such as the discovery of electricity and the development of automobiles, airplanes, computers, and the internet, revolutionized communication, transportation, and manufacturing. Globalization emerged as a defining feature, enhancing interconnectedness and interdependence of the world's economies, cultures, and populations through advanced communication and transportation (Vdovichena et al., 2022). Politically, the modern era witnessed the rise of nation-states, the spread of democratic ideals, significant geopolitical shifts, wars, and the rise of new political ideologies like communism and capitalism, reshaping the global landscape (Bashovski & Rossi, 2023). It has brought both unprecedented opportunities and challenges, such as environmental degradation and the need for sustainable development, reflecting a complex interplay of progress and problems (Inácio, 2020).

Despite a number positive changes, modern times are facing significant challenges such as climate change, economic inequality, and political instability (Kolinets, 2023). Additionally, issues like digital privacy, cybercrime, and the mental health influence rapid social changes and require the comprehensive solutions. In Ukraine, the ongoing conflict with Russia has significant humanitarian and economic impacts, drawing international attention and support (Kot et al., 2024; Tampubolon, 2022). The debates over human rights, effects of the COVID-19 pandemic, and the role of technology in society continue to shape political landscapes, highlighting the complex nature of contemporary socio-political dynamics.

Obviously, socio-political development is closely connected with culture, particularly art as a fundamental part of it, since art objects often reflect the community values, beliefs, and norms, and they serve as the instruments for expressing political ideologies, social issues, and cultural identity (Kopiievska et al., 2023). At the same time, art influences public opinion and fosters social change (Kot et al., 2024). Also, socio-political development, such as government policies, social movements, and historical events, impact the themes and forms of artistic expression significantly (Johnstone & O'Hare, 2023).

This interconnection highlights the role which culture and art play in reflecting socio-political trends, forming a complex and dynamic relationship within the human society. Public art refers to artworks that are displayed in public spaces and it includes a variety of art forms such as sculptures, murals, installations, and performances. Usually, they are integrated into the urban or natural environment (Demir Türközü & Caliskan, 2021; Mezzadri, 2021). In the context of socio-economic development, public art encourages the economic growth by attracting tourists and investors to an area (Lee et al., 2020).

Public art is most impactful when it is engaging and interactive, as it has the power to connect people with their surroundings and each other in meaningful ways (Milne & Pojani, 2022). Engaging public art draws the attention of visitors, inviting them to interact with artworks through physical engagement with installations, participation in events, or digital interactions created by means of augmented reality (AR) or interactive displays. According to Cheng et al. (2023), public art has great potential to not only beautify public spaces but also to enrich the cultural and social profile of a community. At the same time, public art is deeply interconnected with socio-political development and it often serves as a visual and symbolic expression of the issues, values, and aspirations of a society (Mosendz et al., 2022).

For example, during periods of political protest or social movements, public art can become a powerful form of expression, conveying messages of resistance or hope. Socio-political developments also influence the funding, creation, and reception of public art (Johnstone & O'Hare, 2023). Government policies, public funding priorities, and societal attitudes towards art and culture all impact the availability and nature of public art projects. Additionally, public art is used as a tool for political or social agendas, with governments or advocacy groups promoting specific messages or ideologies artworks (Iannelli & Marelli, 2019). Therefore, public art is not only a reflection of socio-political development but also a dynamic force that can shape and influence it.

The investigation of socio-political impact of public art installations is to understand how these artworks influence and are influenced by the social and political dynamics of a community. Such analysis seeks to uncover the ways in which public art shapes public discourse, community identity, and civic engagement. Definitely, studying the socio-political impact of public art, researchers can provide explanations how these installations contribute to the cultural, social, and economic development of the society. This knowledge is aimed to inform decision-making around public art policies or urban planning strategies, enhancing the role of public art in creating an enthusiastic, inclusive, and reflective community.

Literature Review

Public art is a topic of extensive studies across various fields, including philosophy, history, education, and cultural studies. Philosophically, scholars explore the nature and purpose of public art, examining questions related to aesthetics, meaning, and the role of art in the society (Rietveld & Kiverstein, 2022). Some philosophical investigations show how public art shapes perceptions, emotions, and experiences, and describe its potential to provoke reflection and social change (Rietveld & Kiverstein, 2022). Historians trace the evolution of public art from ancient civilizations to the contemporary society, analyzing its cultural, social, and political significance over time (Bilozub et al., 2023).

In educational contexts, public art serves as a valuable resource for teaching and learning about art, history, culture, and civic engagement (Pedroso et al., 2023). Educators incorporate public art into curricula to foster critical thinking, creativity, and cultural awareness among students, encouraging them to explore and interpret artworks in public spaces (Alimi Selmani, 2024; Huang & Zheng, 2023). Some works are devoted to the analysis of public art from the cultural perspective reflecting the ways how different groups of actors shape the cultural identities, values, and narratives within the society.

In scientific works, public art is interpreted as a cultural phenomenon that contributes to the formation of collective memory, identity, and heritage within communities (Milne & Pojani, 2022). Also, it is described as a form of cultural expression and communication that shapes social interactions and community dynamics (Cheng et al., 2023). Villanueva et al. (2024) indicate that public art is a tool influencing citizens' emotions, perceptions, and behavior. At the same time, it has certain therapeutic and healing potential (Tabor et al., 2023). In urban studies, public art refers to artistic expressions and installations that are integrated into the settlement environment, typically in public spaces (Mezzadri, 2021).

It is important to note that public art is often seen as a "voice of the people" (Müller, 2019; Røyseng, 2021; Timko, 2021). According to Røyseng (2021), public art is accessible to everyone, being a powerful tool for expressing collective sentiments and experiences. In this context, public art also serves as a platform for marginalized or underrepresented groups to share their stories and perspectives, giving voice to those people who do not have access to traditional forms of expression. Simoniti (2021) indicates that this art starts an important dialogue, encouraging citizens to engage with important social, political, and cultural issues.

Public art has been a part of human expression for thousands of years, with examples dating back to ancient civilizations (Bilozub et al., 2023). Some of the earliest forms of public art can be traced to the ancient Egyptians, Greeks, and Romans, who created statues, monuments, and architectural complexes to commemorate leaders, gods, or important events. The functions of public art have evolved over time, showing the changes in society, culture, and artistic practices (Marcondes, 2020). In ancient civilizations, public art often served ceremonial and religious functions (Kecheng & Hussain, 2023). Arranz Otaegui & Moore (2022) insist that throughout history, rulers and governments have used public art as a tool for propaganda and ideological control.

In more recent times, such artwork has increasingly been used as a form of social commentary and critique, addressing pressing issues such as politics, social justice, and the environment (Marcondes, 2020). Artists use public art to provoke thought and stimulate debate on important issues in the society. Contemporary public art often emphasizes community engagement, urban regeneration, and environmental challenges (Cheng et al., 2023). Importantly, this art raises awareness about social inequalities based on factors such as race, gender, class, and sexuality (Zebracki, 2020). Also, these days public art reflects and responds to political conflicts, wars, and acts of violence (Kot et al., 2024). Artists use public art to memorialize victims of violence, to protest against war and injustice, and to promote peace.

A number of investigations mention different types of public art. They include monuments and memorials that commemorate historical events or individuals; sculptures and statues; murals used convey social or political messages or to transform urban or natural environments (Demir Türközü & Caliskan, 2021; Mezzadri, 2021). In some works, performance art is mentioned (Iannelli & Marelli, 2019). It refers to a wide range of activities, such as dance, theater, music, and interactive performances, and is often used to engage audiences and provoke thought. Currently, digital and multimedia art incorporating digital technologies has become more popular among artists to explore new forms of creativity and expression (Young & Marshall, 2023). Stoltz (2023) differentiates environmental or ecological art that addresses the environmental issues and sustainability concerns through artistic expression.

Public art installations vary significantly across countries, reflecting diverse cultural, social, and political contexts. According to American scholars Topaz et al. (2022), in the United States, public art often reflects issues of race, identity, and history. In the UK, public art engages with themes of national identity and colonial history (Grindon et al., 2023). African artworks address the issues of apartheid, reconciliation, and social justice (Olaiya, 2022). In Latin America, public art is used to reflect the country's rich cultural heritage and social diversity (Conduru, 2023). In comparison, Chinese public art shows the country's rapid modernization, economic growth, and emergence it as a global power (Cheng & Worrall, 2021).

Several scholars provided in-depth analyses of specific public art installations in their scientific articles. For example, Korzilius (2022) and Sokołowska-Paryż (2022) explored how the Vietnam Veterans Memorial, known for being minimalist monument, reshaped public commemoration practices in the United States. Some works are devoted to Holocaust memorialization of the past two decades, particularly Auschwitz Memorial in Poland, Monument against Fascism in Germany, and United States Holocaust Memorial Museum (Popescu & Schult, 2019). Ballard & Linden (2019) studied Smithson's land art sculpture Spiral Jetty that could be named as the first marker of the Anthropocene in art.

In addition, the researchers explained the narrative qualities of an installation and described its ability to articulate human relationships with environmental transformation. One notable example is the "Fearless Girl" statue installed on Wall Street in New York City. This bronze sculpture of a young girl facing the famous "Charging Bull" symbolizes a stand against gender inequality in corporate leadership. Chused (2020) admits that the installation became a global icon of female empowerment and prompted discussions on women's roles in business and the broader workforce.

Therefore, the literature review proves that public art installations around the world raise important socio-political questions that reflect the unique challenges and complexities of each country's history and society (Røyseng, 2021). These installations provide a platform for dialogue, reflection, and engagement with pressing issues, making them an integral part of the cultural landscape (Simoniti, 2021). At the same time, public art changes the socio-political landscape of a country creating debates about important social and political issues or promoting cultural understanding and tolerance by showcasing diverse cultural perspectives (Müller, 2019). From the works of Archer (2024), it is obvious that public art addresses

historical injustices. Moreover, it fosters civic engagement by encouraging people to participate in public life (Iannelli & Marelli, 2019).

Taking this into consideration, the study is to analyze the socio-political impact of public art in the modern era. Accordingly, the authors focus on the following research objectives: (1) interpret public art from philosophical point of view through impact indicators; (2) to describe public art installations as a result of socio-political transformations; (3) to reveal the characteristics of national identity through public art installations; (4) to study public art installations in the time of war; and (5) to compare symbolic boundaries of public art installations throughout the world.

Methodology

To achieve the research objectives the descriptive methodology was applied, particularly descriptive literature analysis, visual and document analysis, theoretical assessment of impact indicators, historical and comparative analysis, and content analysis. While investigative the problem of sociopolitical impact of public art installations, the descriptive methodology was introduced within the framework of positivism, constructivism, and critical theory (Beinart, 2020; Cheng at al., 2023). Positivism sought to reveal the common patterns and regularities through the empirical evidence, logical reasoning, and systematic observation of using public art installations in the urban and natural environment.

Aiming for objective generalization and synthesis of the scientific findings, positivism contributed to the structurization and standardization of descriptive methods. Constructivism helped to interpreted the knowledge based on the socio-political processes and interactions within the society. Also, the paradigm recognized multiple realities and perspectives on the problem, resulting in the detailed description of the role of public art installations.at the same time, critical theory examined the socio-political dynamics, society structures, and socio-political discourse to study the social, cultural, educational, and political influence of artworks.

The exploration of socio-political impact of public art installations was performed in three stages: planning and data collection; data analysis; interpretation of results and dissemination. Each stage involved specific methods to ensure the research is accurate and comprehensive. The first stage – planning and data collection – was oriented towards defining the research objectives based on the existing literature analysis, choosing the methodology design, and collection of quantitative and qualitative data on the socio-political impacts of art installations. At this stage, the descriptive literature analysis, visual and document analysis, historical and comparative analysis were implemented.

The descriptive literature analysis was used to examine the existing written sources and involved systematically reviewing of various types of literature to understand the context and effects of the public art installation. As a valuable method, it allowed to explore a wide range of works to explain how public art shapes the country's social and political profile and how it is changed through socio-political transformations. Importantly, while exploring the socio-political impact of public art installations, the interdisciplinary approach was applied and it drew on the literature from history, sociology, political science, and cultural studies analyzing the research phenomenon from the multiple perspectives. The visual analysis examined and interpreted the visual data, such as artworks, photographs, videos, and other visual media. This approach was particularly useful in understanding the context of public art installations and their socio-political impact upon the society development.

The document analysis related to the systematic procedure for evaluating the official documents to extract the necessary information on the phenomenon of public art installed in the urban landscape. Visual and document analysis helped to understand the historical period and cultural background of artworks as well as to consider the social, political, and economic conditions through the time. The historical analysis involved the interpretation and contextualization of historical data to make the clear conclusions about the past and its influence on the present and future. At the same time, the comparative analysis involved understanding public art installations as a socio-political phenomenon in different countries to identify general patterns.

At the second stage the data was analyzed and prepared for presentation by checking for possible errors, examining the qualitative data, and organizing the quantitative data. Here, the theoretical assessment of impact indicators was employed. It enabled to evaluate the existing theoretical frameworks, concepts, or

models that are relevant to the study of the role of public art installations and to outline the impact indicators that are necessary to contribute to the theoretical knowledge about the research problem. These indicators reflect their social, cultural, economic, and political effects and include the following: community engagement, media coverage, cultural awareness and education, artistic innovation, visitor statistics, influence of the installation on urban planning and development, sustainability and changes in public behavior.

The third stage related to the interpretation of the findings in the context of the research questions and presentation of the broader socio-political landscape where public art installations are applied widely. The researchers, employing the content analysis, enabled to compare the outcomes with the existing scientific literature to highlight the contributions and implications. When the socio-political impact of public art installations was explored, the content analysis involved the examination of textual and visual to identify the patterns of the research problem and to transform qualitative data into conclusions. Finally, a concise summary of the main findings and recommendations for artists, art experts, policymakers, and the general public was presented for further dissemination.

Results and Discussion

Philosophical interpretation of impact indicators related to public art installations

The study of public art installations through philosophical theories involves the analyzing of these artworks on the basis of different philosophical frameworks and perspectives. Since philosophy provides a number of analytical tools for examining the nature of art and its role in the society, the researchers are able to uncover the meaning and significance in public art installations more accurately (Smith, 2019). According to the recent findings, three philosophical theories were distinguished: aesthetic theory (McNally et al., 2023), semiotics (dos Reis & Elias, 2020), and postmodernism (Bekh et al., 2021). Aesthetic theory was explained by Immanuel Kant who argued that the aesthetic experience is based on subjective judgments of beauty and the feeling of pleasure or disinterest (Costello, 2021). Public art can be analyzed as an object that possesses an ability to evoke these aesthetic responses.

McNally et al. (2023) indicate that aesthetics considers the peculiarities of public art and, therefore, helps to distinguish it from other forms of human expression. Charles Sanders Peirce's semiotics is related to the theory of signs and symbols (de Waal, 2024). Public art installations can be assessed with the use of the signs and symbols they are characterized by and the meanings they convey. Further semiotics was extended to cultural analysis and showed that the signs are culturally constructed and can have multiple meanings within the society (dos Reis & Elias, 2020).

At the same time, postmodernism, developed by Jean-François Lyotard, is related to the fact that in the postmodern era, public art has lost their single value, leading to the plurality of voices and perspectives (Burdman, 2020). As a result, studying the socio-political impact of public art installations they should be analyzed as fragmented and plural object of a heterogeneous nature which may have many different meanings.
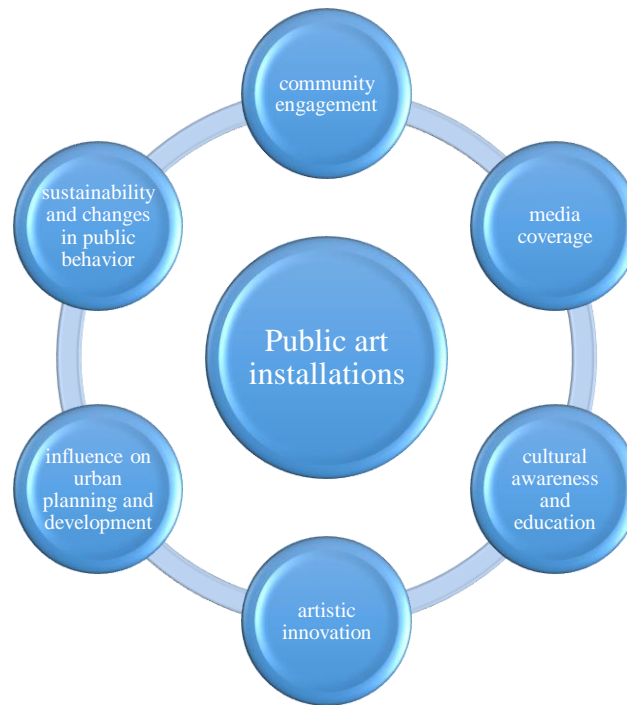
Figure 1. Impact indicators of public art installations.
Source: authors' own development.

Considering philosophical theories, the following impact indicators of public art installations were revealed: community engagement, media coverage, cultural awareness and education, artistic innovation, visitor statistics, influence of the installation on urban planning and development, sustainability and changes in public behavior (dos Reis & Elias, 2020). Figure 1 demonstrates impact indicators of public art installations. The findings show that community engagement is a critical indicator in studying the socio-political impact of public art installations, as it reflects the extent to which these artworks influence the local community.

Petronienė & Juzelėnienė (2022) insist that when community members are actively involved in the artistic process, art becomes a reflection of their values, experiences, and aspirations. As artworks often address themes that are relevant to the community's history, culture, and current challenges, the use of public art installations can lead to greater political awareness and activism among local citizens. Media covers the influence of public art installations beyond the immediate community (Røyseng, 2021). Obviously, positive media coverage enhances the visibility and prestige of artworks, drawing attention to their cultural, social, and political significance. On the other hand, negative media coverage deforms the narrative around public art, affecting how it is perceived by the broader public and policymakers.

At the same time, public art installations serve as powerful educational tools, helping to raise awareness about cultural heritage and traditions (Banerjee, 2023). Also, they represent different cultural perspectives and, therefore, broaden people's understanding of the world and promote intercultural dialogue. Moreover, public art is used in both formal and informal education, providing the extensive opportunities for learning outside the traditional classroom (Pedroso et al., 2023).

For example, Huang & Zheng (2023) explain that public art installations are integrated into the curricula of educational institution or used as educational resources, enhancing cultural literacy and understanding among learners. Artistic innovation in public art installations promotes the social changes and cultural transformation as well (Young & Marshall, 2023). It was found that artistic innovation often separated from traditional forms and styles encourages artists to address the burning social and political issues.

Visitor statistics provides the quantitative data on the engagement of artworks with the public (Lee et al., 2020). Using such data, the researchers assess the popularity of public art installations. High visitor numbers suggest that the artwork captures public interest and is successful to perform its socio-political role. According to Downey & Sherry (2023), visitor statistics is an indicative of artwork's ability to integrate

with the community and its potential to have a certain impact on socio-political discourse. Obviously, public art plays a transformative role in formation of the physical and cultural landscape of the settlement. This can contribute to the development of a unique sense of place and provokes economic growth and tourism.

Other indicator, sustainability and changes in social behavior, contributes to raising the awareness about the environmental issues, promoting eco-friendly practices, and inspiring positive initiatives for sustainable development (Stoltz, 2023). For example, public art installations that use recycled materials encourage people to consider their impact on the environment and adopt more sustainable lifestyles. Considering impact indicators of public art installations above-mentioned, it is logical to proceed to the analysis of socio-political impact of artworks and understand their roles in transformation of the modern community.

Public art and socio-political transformations

Public art plays a significant role in driving socio-political transformations by promoting significant changes within the society. Firstly, public art installations strengthen cultural identity and foster a sense of belonging among community members (Kopiievska et al., 2023). This leads to a greater appreciation for diversity and a more inclusive society. Then, some public art projects empower residents to take ownership of their neighborhoods and advocate for positive change (Cheng at al., 2023). This helps to increase civic engagement and a stronger sense of community integration. Also, it was found that certain artworks address social justice issues, such as inequality, discrimination, or human rights abuses, can raise awareness and mobilize support for advocacy efforts (Topaz et al., 2022). Public art positively affects urban spaces, attract investment, and create economic opportunities (Demir Türközü & Caliskan, 2021).

Moreover, public art installations that challenge political norms or criticize government policies initiate the debates about important political issues and increase political awareness among citizens (Johnstone & O'Hare, 2023). Considering the importance of environmental protection and reduction in the anthropogenic load, public art installations often address the environmental issues, such as climate change or conservation, and they aim at raising the awareness about these issues and inspire action to protect the environment (Stoltz, 2023).

Scientifically, the socio-political impact of public art is studied using various methodologies to understand how public art influences individuals and whole communities. Above all, it was found that many scientific sources describe psychological influence that concerns how public art affects individuals' emotions, attitudes, and behaviors (Rietveld & Kiverstein, 2022). Husselman et al. (2024) mention that public art is an effective cognitive stimulus as well. Some findings indicate that public art shapes social interactions and community dynamics (Cheng at al., 2023). Form this point of view, public art installations influence the patterns of social behavior, such as community engagement, cooperation, and conflict resolution. Stoltz (2023) revealed that public art leads to significant behavioral changes in people.

It is important to mention that public art installations may have short-term and long-term effects (Blatt-Gross, 2023; Thompson & Day, 2020). Thus, short-term effect relates to immediate emotional impact and increased awareness about social, cultural, or political issues, making the viewers to engage with these topics more thoroughly. This leads to temporary changes in attitudes or behaviors. In this context some scholars state about enhanced aesthetic experience when public art provides a momentary escape from the routine and contributes to a sense of enjoyment. Also, long-term effect is associated with cultural impact and social change shifting the attitudes or behaviors over time (Thompson & Day, 2020). Some works describe the quality of public art to symbolize political ideals and aspirations, serving as a visual representation of a community's values (Katsambekis et al., 2022). Artworks that celebrate democracy, freedom, and equality can inspire people to strive for a better society and have profound long-term effect.

Understanding national identity through public art installations

Public art installations often serve as visual representations of a country's history, culture, and values (Cheng et al., 2023). That is why such artworks can play a significant role in promoting national identity (Grindon et al., 2023). According to the recent findings, public art installations belong to the historical narrative and contribute to the collective memory of the society through commemoration of historical events, representation of historical figures, reflection of community's cultural heritage and traditions ensuring that they are passed down to future generations (Mezzadri, 2021).

Public art installations can incorporate national symbols, such as flags, emblems, and anthems, which are important markers of national identity (Leahy, 2024). These symbols help to unify the population and create a sense of belonging to a larger national community. At the same time, reflecting and reinforcing the shared values and beliefs of a nation, such as freedom, democracy, and equality, public art installations not only represent the nation's major principles and ideals, but help to understand national identity (Wen & White, 2020).

A number of scholars studied the use of public art in schools to teach students to understand national identity and also foster their creativity, empathy, and a sense of community (Al-Zadjali, 2024). It was found that public art is integrated into the existing curriculum subjects such as history, social studies, and art (Huang & Zheng, 2023). Teachers use public art installations as case studies to explore historical events, cultural traditions, and artistic styles (Zhang et al., 2023). Other techniques include field trips and excursions, particularly museum visits (Pedroso et al., 2023). The special attention of educators is paid towards organization of art projects and workshops within the educational process (Mohd Hawari & Mohd Noor, 2020).

To perform tasks, students create their own artworks or express their attitudes towards the public art installation mentioned in the educational materials. Such tasks can be carried out individually or in groups. Some educators recommend to implement peer learning since it helps to strengthen community integration and associate themselves with the nation (Al-Zadjali, 2024). Importantly, various digital resources such as virtual tours, online exhibitions, and educational videos can be used to introduce students to public art from around the world (Young & Marshall, 2023). These resources can supplement the traditional educational materials and provide students with a broader information on the topic. Therefore, introducing public art within the educational process can enhance students' understanding of art, culture, and history, while also fostering a sense of community.

Public art installations in the time of war

War remains an important topic today due to its far-reaching impacts on societies, economies, and global politics. Despite efforts to promote peace and resolve conflicts through diplomatic means, many regions of the world continue to experience armed conflicts and warfare (Kot et al., 2024). As a result, public art installations play a significant role in the time of war being powerful symbols of resistance, remembrance, and resilience (Kuznetsova, 2021). Some findings insist that artworks provide the communities with a means to express their strength, creativity, and hope in the face of adversity (Leahy, 2024).

Also, they inspire courage and determination among people affected by war. Public art installations often serve as memorials to honor the lives lost during wartime (Demir Türközü & Caliskan, 2021). These artworks provide a space for reflection and remembrance, paying the tribute to those who sacrificed for their country. Many examples show that public art serves as a form of political attitudes towards war, critiquing its causes and consequences. Also, it is necessary to differentiate installations that promote peace, forgiveness, and understanding. Such objects help people overcome the post-war trauma and work towards a more peaceful future (Leahy, 2024).

Among post-war public art installations there should be mentioned the Memorial to the murdered Jews of Europe (Berlin, Germany), the Hiroshima Peace Memorial (Hiroshima, Japan), and the 9/11 Memorial and Museum (New York City, USA). In Ukraine which was affected by naval incidents, cyberwarfare, antiterrorist operation in the east since 2014, and further – by full-fledged Russo-Ukrainian war, there are many examples of such installation (Kuznetsova, 2021; Leahy, 2024). The Wall of Remembrance of the Fallen for Ukraine (Ukrainian: Стіна пам'яті загиблих за Україну) is one of the most well-known war-time public art installations. The wall serves as a memorial to those who have lost their lives and as a call for peace and reconciliation.

Presently, public art installations can be digital as well. They implement technology to create interactive, dynamic, and often immersive experiences in public spaces. These installations can range from digital projections and interactive screens to AR experiences (Young & Marshall, 2023). The Fallen 9000 is a powerful art installation created by Andy Moss and Jamie Wardley (UK). This project involved creating thousands of sand drawings on the beaches of Normandy, representing fallen soldiers. While the artwork was temporary, digital technology captured and shared the images widely online, creating a lasting digital memorial.

Symbolic boundaries of public art installations throughout the world

Definitely, public art installations possess symbols to create the socio-political impact since they are designed as powerful communicative tools to convey complex ideas and resonate deeply with the public (Bilozub et al., 2023). Symbols introduced in public art reflect the collective memories, historical events, cultural identities, and social movements, making them recognizable and emotionally engaging (Milne & Pojani, 2022). For instance, the use of a peace symbol in anti-war art instantly communicates a message of resistance and hope, evoking a strong emotional response. Provocative or ambiguous symbols challenge prevailing norms and invite diverse interpretations, sparking conversations and debates (Milani, 2022).

For example, Banksy's use of provocative imagery in street art often comments on political and social issues, prompting public discourse. Symbols also help create shared narratives, uniting communities around common histories, and enhancing the memorability of the art (Johnstone & O'Hare, 2023). Iconic symbols, such as the broken chains in memorials representing freedom from oppression, make the artwork easily recognizable and ensure its socio-political messages have a lasting impact (Smetzer, 2024). Thus, the integration of symbols in public art is essential for effectively conveying socio-political messages and engaging the public in meaningful ways. Table 1 represent symbolism used in various public art installations.

Table 1.
Socio-political symbolism of public art installations

Continent	Country	Installation	Symbols
Europe	Germany	The Berlin Wall	Symbolizes the division between East and West Berlin during the Cold War; Depicts the themes of freedom, resistance, and the triumph of the human spirit over oppression or authoritarian regimes.
	France	The Great Arch of the Defense	Represents the country's progress and contemporary ambitions; Dedicated to humanitarian ideals and human rights, reflecting commitment to democratic values.
	Ukraine	The Holodomor Memorial	Symbolizes the tragedy of the Holodomor and serves as a reminder of the millions of Ukrainians who died as a result of Soviet policies.
North America	United States	Statue of Liberty	Represents the ideals of liberty, enlightenment, and opportunity.
Asia	Kazakhstan	Bayterek Tower	Demonstrates Kazakhstan's aspirations for the future, its openness to the world, and its desire to establish friendly relations with other nations; Symbolizes the unity and diversity of Kazakhstan's population.
	India	The Gateway of India	Symbolizes India's colonial past and its struggle for independence; serves as a symbol of the country's freedom and progress.
South America	Brazil	Christ the Redeemer	Symbolizes Brazil's predominant religion, Christianity; Represents peace and protection over the city.
	Urugway	La Mano (The Hand)	Symbolizes the power of the human spirit and the connection between humans and nature.
Africa	Nigeria	The African Renaissance Monument	Symbolizes Africa's renewal and rebirth; represents Nigeria's role as a leader in Africa and its commitment to progress and development.

Source: authors' own development.

Therefore, the findings prove that public art installations perform the significant socio-political impact within the society, including the formation of national identity, expressing political and social issues, improvement of education, informing the community over the past events, presenting ecological problem,

orientation towards strengthening of human rights, etc. Currently, public art installations have different representations and forms such as digital art, ecological art, sculptural installations, or murals. The assessment of socio-political impact of these installations shows that artwork is oriented towards the enrichment of cultural heritage of the people as well as the creation of meaningful and engaging experiences for the community.

At the same time, the research proves that public art often has subjective effects on different communities and individuals, making it difficult to quantify its influence. The research struggled to establish clear causal relationships between public art installations and specific socio-political outcomes, as these effects are often indirect and can be influenced by a number factors, such as media coverage, public policy, and pre-existing social movements. Besides, in some cases, the research focused on well-known and highly publicized installations, which could incline the findings toward more successful or well-discussed cases, while less visible works that also contribute to socio-political change, were not presented widely.

Conclusions

Public art is interpreted as a cultural phenomenon that contributes to the formation of collective memory, identity, and heritage within communities. Also, it is a form of cultural expression and communication or artistic expressions that are integrated into the settlement environment, typically in public spaces. The findings how that the functions of public art have evolved over time and have changed significantly. Currently, such artwork has increasingly been used as a form of social commentary and critique, addressing pressing issues such as politics, social justice, and the environment. Public art is used to provoke thought and stimulate debate on important issues in the society. Contemporary public art often emphasizes community engagement, urban regeneration, and environmental challenges. The types of public art include: monuments and memorials; sculptures and statues; and murals. At present, digital and multimedia art incorporating digital technologies has become popular and demonstrates new forms of creativity and expression.

The investigation revealed that there are three philosophical theories applied to study the impact of public art installations. They are the following: aesthetic theory, semiotics, and postmodernism. In this context, socio-political impact of public art installations is analyzed as fragmented and plural phenomenon of a heterogeneous nature. Considering philosophical theories, certain impact indicators of public art installations were distinguished, particularly community engagement, media coverage, cultural awareness and education, artistic innovation, visitor statistics, influence of the installation on urban planning and development, sustainability and changes in public behavior.

It was proved that public art plays a significant role in driving socio-political transformations by promoting significant changes within the society. Public art installations strengthen cultural identity, advocate for positive change, increase civic engagement, and address social justice issues. Also, public art positively affects urban spaces, attract investment, and create economic opportunities. The study demonstrated that public art installations have short-term and long-term effects. Thus, short-term effect relates to immediate emotional impact and increased awareness about social, cultural, or political issues, making the viewers to engage with these topics more thoroughly. Long-term effect is associated with cultural impact and social change.

According to the recent findings, public art installations belong to the historical narrative and contribute to the collective memory of the society through commemoration of historical events, representation of historical figures, reflection of community's cultural heritage and traditions. As a result, public art installations represent the nation's major principles and ideals, and help to understand national identity. It was stated that public art is actively used in schools to teach students to understand national identity as well as foster their creativity, empathy, and a sense of community.

Public art installations play a significant role in the time of war being powerful symbols of resistance, remembrance, and resilience. It was found that installations provide the communities with necessary instruments to express their strength, creativity, and hope in the face of adversity. Many examples show that public art serves as a form of political attitudes towards war and promoting peace in the war-torn communities. In the research different post-war public art installations were described. Therefore, public art installations possess symbols to create a socio-political impact since they are designed as powerful communicative tools to convey complex ideas and resonate deeply with the public.

The research can influence social and political discourse and be implied to guide the development of public art policies that are oriented towards the works promoting social justice and leading to positive change. Urban planners can use these outcomes to integrate public art into the urban landscape in ways that maximize its socio-political impact. Obviously, when the conditions under which public art drive changes are well understood, these professionals design spaces that encourage public interaction, dialogue, and reflection. Additionally, the research can inform artists about the socio-political impact of public art in the modern era and aspire them to create new projects within communities, ensuring that installations are not only aesthetical items but also socially meaningful and impactful works.

Further research should focus on the understanding of the impact of public art on various communities, individuals, and urban environments. This should include the analysis of its role in fostering cultural identity and promotion of social justice. The researchers should also concentrate on the investigation of innovative approaches to creating of public art objects, such as the use of digital technologies and interactive installations. Additionally, there is a need to examine the sustainability of artworks, especially those which are characterized by long-term effect. It is important to mention that addressing these areas will improve the practices in public art and ensures it is designed in a meaningful way for the community.

Bibliographic References

Alimi Selmani, T. (2024). The influence of music on the development of a child: Perspectives on the influence of music on child development. *EIKI Journal of Effective Teaching Methods, 2*(1). https://doi.org/10.59652/jetm.v2i1.162

Al-Zadjali, Z. (2024) The significance of art in revealing a culture's identity and multiculturalism. *Open Journal of Social Sciences, 12*, 232-250. doi: 10.4236/jss.2024.121015

Archer, A. (2024). How public statues wrong: Affective artifacts and affective injustice. *Topoi*, 1-11. https://doi.org/10.1007/s11245-024-10025-y

Arranz Otaegui, I., & Moore, K. C. (2022). Visual art and propaganda ecologies in the Basque country: A sample of Guernica motifs from the Benedictine sticker archives (1978–1989). *Arts, 11*(3), Article 62. https://doi.org/10.3390/arts11030062

Ballard, S., & Linden, L. (2019). Spiral Jetty, geoaesthetics, and art: Writing the Anthropocene. *The Anthropocene Review, 6*(1-2), 142-161. https://doi.org/10.1177/2053019619839443

Banerjee, P. (2023). Sustainable Art and Cultural Heritage: Balancing Conservation and Innovation. *Expressions: A Journal of Art and Culture, 1*(01). https://doi.org/10.57939/expressions.v1i01.2

Bashovski, M., & Rossi, N. (2023). Introduction: political subjectivity in times of crisis. *Globalizations*, 1-16. https://doi.org/10.1080/14747731.2023.2186102

Beinart, K. (2020). Don't look back: The challenges of public art and meanings of authenticity in heritage contexts. *Public Art Dialogue, 10*(2), 161-183. https://doi.org/10.1080/21502552.2020.1790873

Bekh, Y., Romankova, L., Vashkevych, V., Yaroshenko, A., & Lipin, M. (2021). Artistic aspects of embodiment of postmodern theater practices in the context of COVID-19 pandemic. *Postmodern Openings, 12*(1Sup1), 313-322. https://doi.org/10.18662/po/12.1Sup1/287

Bilozub, L., Tymoshenko, M., Bedrina, N., Voronova, N., & Andrushchenko, T. (2023). Art history research in scientific discourse. *Revista Eduweb, 17*(1), 167-175. https://doi.org/10.46502/issn.1856-7576/2023.17.01.16

Blatt-Gross, C. (2023). Short- and long-term outcomes of community-based art education among students in higher education. *Education Sciences, 13*(2), 166. https://doi.org/10.3390/educsci13020166

Burdman, J. (2020). Universality without consensus: Jean-François Lyotard on politics in postmodernity. *Philosophy & Social Criticism, 46*(3), 302-322. https://doi.org/10.1177/0191453719854215

Cheng, H., & Worrall, J. (2021). Unfolding China's urban development: The implementation of public art in Beijing and Shanghai. *Journal of Chinese Architecture and Urbanism, 3*(1), Article 1025. https://doi.org/10.36922/jcau.v3i1.1025

Cheng, Y., Chen, J., Li, J., Li, L., Hou, G., & Xiao, X. (2023). Research on the preference of public art design in urban landscapes: Evidence from an event-related potential study. *Land, 12*(10), Aricle 1883. https://doi.org/10.3390/land12101883

Chused, R. (2020). Charging Bull, Fearless Girl, Artistic Composition, and Copyright. *NYU Journal of Intellectual Property and Entertainment Law, 10*(1). https://jipel.law.nyu.edu/charging-bull-fearless-girl-artistic-composition-and-copyright/

Conduru, R. (2023). Roda and Terreiro: The Historiography of Brazil's Visual Arts at the Crossroads of Globalization. *Arts, 12*(3), 103. https://doi.org/10.3390/arts12030103

Costello, D. (2021). Conceptual art and aesthetic ideas. *Kantian Review, 26*(4), 603-618. doi: 10.1017/S1369415421000388

de Waal, C. (2024). The significance of Charles Sanders Peirce for the twenty-first century. In C. de Waal (ed.) *The Oxford Handbook of Charles S. Peirce.* Oxford Academic. https://doi.org/10.1093/oxfordhb/9780197548561.002.0007

Demir Türközü, C., & Caliskan, O. (2021). Mural as public art in urban fabric: An attempt to link configurational approach to perceptual morphology. *Journal of Design for Resilience in Architecture and Planning, 2*(Special Issue), 147-170. https://doi.org/10.47818/DRArch.2021.v2si040

dos Reis, M., & Elias, H. (2020). Advertising urban murals: an analysis from social semiotics. *CAP - Public Art Journal, 1*(2), 19-29. https://doi.org/10.48619/cap.v1i2.98

Downey, H., & Sherry, J. F. (2023). Public art tourism: Atmospheric stories in city margins. *Annals of Tourism Research, 101*, Article 103606. https://doi.org/10.1016/j.annals.2023.103606

Grindon, G., Williams, J., & Hay, D. (2023). Mapping British public monuments related to slavery. *Slavery & Abolition, 45*(2), 384-407. https://doi.org/10.1080/0144039X.2023.2264837

Huang, Y., & Zheng, G. (2023). The influence and function of the public art industry on aesthetic education under the background of new curriculum reform. *Herança, 6*(2), 174-190. https://doi.org/10.52152/heranca.v6i2.758

Husselman, T.-A., Filho, E., Zugic, L. W., Threadgold, E., & Ball, L. J. (2024). Stimulus complexity can enhance art appreciation: Phenomenological and psychophysiological evidence for the pleasure-interest model of aesthetic liking. *Journal of Intelligence, 12*(4). Article 42. https://doi.org/10.3390/jintelligence12040042

Iannelli, L., & Marelli, C. M. (2019). Performing civic cultures: Participatory public art and its publics. *International Journal of Cultural Studies, 22*(5), 630-646. https://doi.org/10.1177/1367877919849964

Inácio, S. (2020). Sculpture and sustainability. *CAP - Public Art Journal, 2*(1), 120-131. https://doi.org/10.48619/cap.v2i1.357

Johnstone, J., & O'Hare, M. (2023). Art for policy and policy for art. *Journal of Public Affairs Education, 30*(2), 256–273. https://doi.org/10.1080/15236803.2023.2254631

Katsambekis, G., Iliadis, C., Balampanidis, I., & Papataxiarchis, E. (2022). Emotions of protest in times of crisis: representation, dislocation and remedy in the Greek 'squares movement.' *Political Research Exchange, 4*(1). https://doi.org/10.1080/2474736X.2022.2035192

Kecheng, Z., & Hussain, M. (2023). The historical origin and public manifestation of public art. *Pakistan Social Sciences Review, 7*(3), 61-71. https://doi.org/10.35484/pssr.2023(7-III)06

Kolinets, L. (2023). International Financial Markets of the Future: Technological Innovations and Their Impact on the Global Financial System. *Futurity of Social Sciences, 1*(3), 4-19. https://doi.org/10.57125/FS.2023.09.20.01

Kopiievska, O., Haidukevych, K., Pashkevych, M., Kozlovska, M., & Korolenko, E. (2023). Sociocultural practice in the discourse of creative industries development. *Postmodern Openings, 14*(1), 01-15. https://doi.org/10.18662/po/14.1/600

Korzilius, L. (2022). The Vietnam Veterans Memorial – Presenting the Unpresentable. *5th International Conference of Contemporary Affairs in Architecture and Urbanism (ICCAUA-2022)* (pp. 523-541). Analya: Alanya HEP University. https://doi.org/10.38027/ICCAUA2022EN0014

Kot, S., Mozolevska, A., Polishchuk, O., & Stodolinska, Y. (2024). The discursive power of digital popular art during the Russo-Ukrainian war: Re/shaping visual narratives. *Arts, 13*(1), Article 38. https://doi.org/10.3390/arts13010038

Kuznetsova, I. (2021). The feminist geopolitics of Donbas: The role of art in challenging bordering. *Region, 10*(1), 61-84. https://www.jstor.org/stable/27127996

Leahy, E. L. (2024). State murals, protest murals, conflict murals: Evolving politics of public art in Ukraine. *Arts, 13*(1), 1. https://doi.org/10.3390/arts13010001

Lee, R., Hong, K., Chang, W., & Tan, A. W. K. (2020). Economic growth and the arts: A macroeconomic study. *Cogent Business & Management, 7*(1). https://doi.org/10.1080/23311975.2020.1807203

Marcondes, M. J. (2020). Public art and modernity. *CAP - Public Art Journal, 1*(2), 8-17. https://doi.org/10.48619/cap.v1i2.111

McNally, D., McClymont, K., Brookes, E., Landau-Donnelly, F., Luger, J., Lanci, G., & Griffin, L. (2023). Planning, art, and aesthetics: Edited by Katie McClymont and Danny McNally. *Planning Theory & Practice, 24*(3), 389-425. https://doi.org/10.1080/14649357.2023.2230046

Mezzadri, P. (2021). Contemporary murals in the street and urban art field: Critical reflections between preventive conservation and restoration of public art. *Heritage, 4*(3), 2515-2525. https://doi.org/10.3390/heritage4030142

Milani, T. M. (2022). Banksy's walled off hotel and the mediatization of street art. *Social Semiotics, 32*(4), 545-562. https://doi.org/10.1080/10350330.2022.2114730

Milne, C., & Pojani, D. (2022). Public art in cities: what makes it engaging and interactive? *Journal of Urban Design, 28*(3), 296-315. https://doi.org/10.1080/13574809.2022.2121272

Mohd Hawari, A. D., & Mohd Noor, A. I. (2020). Project Based Learning Pedagogical Design in STEAM Art Education. *Asian Journal of University Education, 16*(3), 102-111. https://doi.org/10.24191/ajue.v16i3.11072

Mosendz, O., Filimonova-Zlatohurska, Y., Pankiv, H., Bannikova, K., & Vlasiuk O. (2022). Problems and prospects of the development of Ukrainian art (realities of martial law). *Amazonia Investiga, 11*(58), 74-83. https://doi.org/10.34069/AI/2022.58.10.8

Müller, A.-L. (2019). Voices in the city. On the role of arts, artists and urban space for a just city. *Cities, 91*, 49-57. https://doi.org/10.1016/j.cities.2018.04.004

Olaiya, T. A. (2022). Shifting the goalposts: Postcolonial Africa and the west in the global "two publics" of the development paradigm. *Sage Open, 12*(2). https://doi.org/10.1177/21582440221097927

Pedroso, J. E. P., Gicole, C., & Sarches, A. (2023). Learning local history and culture through museum visits. *EIKI Journal of Effective Teaching Methods, 1*(3). https://doi.org/10.59652/jetm.v1i3.36

Petronienė, S., & Juzelėnienė, S. (2022). Community Engagement via Mural Art to Foster a Sustainable Urban Environment. *Sustainability, 14*(16), Article 10063. https://doi.org/10.3390/su141610063

Popescu, D. I., & Schult, T. (2019). Performative Holocaust commemoration in the 21st century. *Holocaust Studies, 26*(2), 135-151. https://doi.org/10.1080/17504902.2019.1578452

Rietveld, E., & Kiverstein, J. (2022). Reflections on the genre of philosophical art installations. *Adaptive Behavior, 30*(6), 589-602. https://doi.org/10.1177/10597123221133189

Røyseng, S. (2021). Public art debates as boundary struggles. *International Journal of Cultural Policy, 28*(5), 581-594. https://doi.org/10.1080/10286632.2021.2009472

Rudenko, O., & Kharkov, S. (2023). Philosophical studies of the future in the context of postmodern knowledge: theory, methodology. *Futurity Philosophy, 2*(3), 4-16. https://doi.org/10.57125/FP.2023.09.30.01

Simoniti, V. (2021). Art as political discourse. *The British Journal of Aesthetics, 61*(4), 559-574. https://doi.org/10.1093/aesthj/ayab018

Smetzer, M. A. (2024). Replacing settler spaces: The transformational power of indigenous public art. *Arts, 13*(2), 60. https://doi.org/10.3390/arts13020060

Smith, T. (2019). Philosophy in the Artworld: Some Recent Theories of Contemporary Art. *Philosophies, 4*(3), 37. https://doi.org/10.3390/philosophies4030037

Sokołowska-Paryż, M. (2022). Un-doing the Vietnam War Legacy: Monumentalizing Second World War Veterans to Legitimize Contemporary US Military Interventions. *Journal of War & Culture Studies, 16*(3), 312-331. https://doi.org/10.1080/17526272.2021.2019373

Stoltz, B. (2023). A nature thing: What does contemporary ecological art produce? *Arts, 12*(2), 67. https://doi.org/10.3390/arts12020067

Tabor, S. M., Van Bavel, M., Fellner, K. D., Schwartz, K. D., Black, T., Black Water, C., & Pepion, J. (2023). Healing, empowering, engaging, learning, and decolonizing through culture: Living wellness, resilience, and resurgence in the classroom through creative arts. *Canadian Journal of School Psychology, 38*(1), 86-104. https://doi.org/10.1177/08295735221147322

Tampubolon, M. (2022). Russia's invasion of Ukraine and its impact on global geopolitics. *European Scientific Journal, 18*(20), 48. https://doi.org/10.19044/esj.2022.v18n20p48

Thompson, J., & Day, J. (2020). Understanding the impact and value of temporary public art sculpture trails. *Local Economy, 35*(3), 186-208. https://doi.org/10.1177/0269094220921811

Timko, T. (2021). The institutionalization of independent public art and its influence on social taste. *SAUC – Street Art and Urban Creativity, 7*(2), 66-73. https://doi.org/10.25765/sauc.v7i2.396

Topaz, C. M., Higdon, J., Epps-Darling, A., Siau, E., Kerkhoff, H., Mendiratta, S., & Young, E. (2022). Race- and gender-based under-representation of creative contributors: art, fashion, film, and music. *Humanities & Social Sciences Communications, 9*(1), 221. https://doi.org/10.1057/s41599-022-01239-9

Vdovichena, O., Tkachuk, S., Zhuzhukina, N., & Lukianykhina, O. (2022). The use of information in the world economy: globalization trends. *Futurity Economics&Law, 2*(4), 4-11. https://doi.org/10.57125/FEL.2022.12.25.01

Villanueva, I. I., Li, N., Jilk, T., Renner, J., Van Matre, B. R., & Brossard, D. (2024). When science meets art on Instagram: Examining the effects of visual art on emotions, interest, and social media engagement. *Science Communication, 46*(2), 210-238. https://doi.org/10.1177/10755470241228279

Wen, X., & White, P. (2020). The role of landscape art in cultural and national identity: Chinese and European comparisons. *Sustainability, 12*(13), 5472. https://doi.org/10.3390/su12135472

Young, T., & Marshall, M. T. (2023). An investigation of the use of augmented reality in public art. *Multimodal Technologies and Interaction, 7*(9), Article 89. https://doi.org/10.3390/mti7090089

Zebracki, M. (2020) Public art, sexuality, and critical pedagogy. *Journal of Geography in Higher Education, 44*(2), 265-284. https://doi.org/10.1080/03098265.2019.1661365

Zhang, K., Hsiao, T. C., & Tian, Q. (2023). A probe into the developmental pattern of public art education in colleges and universities from the perspective of new media. *Frontiers in Psychology, 14*, 1138950. https://doi.org/10.3389/fpsyg.2023.1138950