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Street Art on TikTok: Engaging with Digital Cosmopolitanism

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Abstract

With the rapid development of digital technology, digital cosmopolitans are engaging in street art from the real world to a range of social media. In this study, TikTok, one of the new and important communication channels, is the main source of data to explore how to increase transcultural engagement in digital cosmopolitanism. To limit data to be studied, Jingxuan Peng, who is a TikTok influencer, was observed and used as a case study to understand the relationship between street artists and digital cosmopolitans. As a result, a total of 243 videos and corresponding engagement responses were collected and investigated through text mining analysis. The findings show that TikTok can help increase social interactions between street artists and digital cosmopolitans, and that its content has varying levels of positive impact on transcultural engagement in digital cosmopolitanism.

Keywords

Street Art; Digital Cosmopolitanism; TikTok; Transcultural Engagement; Text Mining

Introduction

Street art is considered a form of self-expression that is freely presented to the audience in the public realm (Hartley 2013). Previous research has shown that street art is an enhancement to contemporary urban life and has a significant impact on the cultural and social order of communities (Austin 2010). Existing literature further confirms that street art offers expressive forms of cosmopolitanism that reclaim voice and reciprocity in the city (Christensen & Thor 2017). However, street artists are less likely to be visible in the community due to the contentious nature of the creation and perception of street art in community and policy discourses, limited space, and norms of governance. Related studies have concluded that street art has gained some social acceptance in public places, but it remains neither officially recognized like public art, nor institutionally tolerated like traditional art in museums (Visconti et al. 2010; Bacharach 2015; Chang 2018).

Fortunately, advances in digital technology begin to change this dilemma, and further facilitate the spread of street art because of its nature. Snyder (2006) highlights that through digital technology, particularly websites and blogs, street artists are able to upload their work, create their identities, and build their reputations among audiences beyond the streets. The rapid development of technology has advanced the role of art, artists, and the acceptance of art in the urban public space as cosmopolitan articulations. Zuckerman (2014) introduces the concept of the digital cosmopolitan and explains how the Internet can lead us to connect. Also, Ponzanesi (2020) interrogates new forms of digital cosmopolitanism by investigating how digital connectivity operates in the everyday lives of digital cosmopolitans.

While there has been a recent increase in research on digital cosmopolitanism, there is still limited research on the role of social media in facilitating digital cosmopolitanism among street art, street artists, and communities on social media. Most studies on cosmopolitanism have focused on the original Stoic philosophy, presupposing a predominantly Western approach to history and modernity (Delanty 2018). With the growing influence of social media on digital cosmopolitanism, it is insightful to explore how street artists use their aesthetic art on social media to successfully interact with transcultural communities and form digital cosmopolitanism.

In this context, this study supports the view that that street art is an expressive form of aesthetic cosmopolitanism, and regards street artists as aesthetic cosmopolitans because they are concerned with aesthetic receptivity and seek out art appreciators in the universal community. It explains the notion of cosmopolitanism in the digital age from the perspective of media and cultural communication rather than the politics of previous studies. The focus of the study is to investigate how street artists employ street art on social media to achieve digital cosmopolitanism. Data were collected from Jingxuan Peng's 243 short videos and corresponding engagement responses (likes, comments, and shares) on TikTok, and analyzed through text mining, which has been used to a limited extent in previous research methods. These videos record her performances of street art that includes playing different musical songs on the Guzheng in the streets of Europe. The results show that aesthetic appreciation and social interaction have a significant impact on transcultural engagement in digital cosmopolitanism. Therefore, this study contributes to filling a gap in the limited analysis of street art and digital cosmopolitanism on social media, and provides practical insights into the engagement of street artists with digital cosmopolitans.

Contextual background

AESTHETIC COSMOPOLITANISM FROM REAL TO DIGITAL

Throughout history, there have been many different perspectives on cosmopolitanism, including political, economic, cultural, aesthetic, and moral cosmopolitanism. But regardless of perspectives, the core concept

of cosmopolitanism is that all people, regardless of political affiliation, do (or at least can) belong to a single community, and that this community should be nurtured (Formosa et al. 2014). Based on this definition, previous research has more often associated cosmopolitanism and communitarianism with politics (de Wilde et al. 2019). As Cicchelli et al. (2019) point out, aesthetic cosmopolitanism is a relatively new term that refers to the aestheticization process of everyday life. Hence, aesthetic cosmopolitanism has not been adequately studied. The existing literature on aesthetic cosmopolitanism is still primarily concerned with the political perspective. Researchers substantiate that street art such as graffiti and pop-rock music is an expression of aesthetic cosmopolitanism, and further investigate the transversal relationship between aesthetic expression and political organization (Regev 2013; Christensen 2017).

Recent research on aesthetic cosmopolitanism has been expanded to include digital cosmopolitanism with the development of digital technologies. Balabanova (2014) claims that the development of cosmopolitan sensibilities has always tended to be associated with new technologies of communication. Also, Delanty (2018) supports that this aestheticization process could previously be found in many contemporary films, shorts, music videos, and advertisements, and is now becoming the norm on new media platforms and social media. With this in mind, cosmopolitan researchers have begun to explore aesthetic cosmopolitanism from real to digital. The existing literature has vigorously debated whether digital technologies contribute to cosmopolitanism. On the one hand, Zuckerman (2014) argues that the digital flow of interactions and ideas has the potential to create and facilitate diverse networks across cultures and many groups, but what actually happens is that the flow of information remains within the bordered, homogenous, and local networks of one's own environment. On the other hand, according to Christensen and Jansson (2015), digital online activities can lead to connections with other groups that are different from ours, which enables cosmopolitan tendencies. In short, digital cosmopolitanism is defined as a new world whose citizens have global interactions marked by the use of social networks (Ponzanesi 2020). More importantly, these debates in previous studies call for a recalibration of the concept of cosmopolitanism in the digital age, given the currently limited analysis of digital cosmopolitanism (Leurs & Hirata 2020).

TRANSCULTURAL ENGAGEMENT AND SOCIAL MEDIA

Whether aesthetic cosmopolitanism is real or digital, transcultural engagement is considered to be at the heart of cosmopolitanism. Previous studies confirm that active, ethically conscious transcultural engagement and inquiry is a crucial activity for cosmopolitans: they argue that such exchanges promote greater inclusion, understanding, and empathy across cultures (Appiah 2007). Aesthetic cosmopolitans are thus defined as those who use art appreciation as a form of transcultural engagement to develop a worldwide aesthetic receptivity and appreciation through their characteristic art objects and corresponding art-appreciative practices (Rings 2019). Similarly, Robbins et al. (2017) believe that connectivity emerges as a fundamental feature of cosmopolitanism in the digital age. Delanty (2018) emphasizes that the future of digital cosmopolitanism depends on the socio-technical capacity of the Internet not only to mediate, but to reciprocate and bridge transcultural connections and networks within and beyond national boundaries. Therefore, digital cosmopolitanism aims to act as the power of the Internet to engage with others and shape new networks of solidarity, promoting intercultural exchange and new types of activities (Leurs & Hirata 2020).

Engagement is a tangible, two-way value creation process and has an impact through positive interactions that lead to behavioral affinity (Hollebeek et al. 2014). Existing studies show that social media helps build network-based online communities that enable people to develop their social identities and meet social needs (Lai 2019; Sutapa 2019; Sohn 2022). Social media are web-based communication platforms in which participants have uniquely identifiable profiles, publicly express connections, and consume, produce and interact with user-generated content (Ellison & Boyd 2014). Examples of social media are Facebook, Instagram, and TikTok. Most extant research has focused on transcultural engagement on Facebook

and Twitter ([Read et al. 2019](#)). With the rapid growth of social media, scholars have recently become more interested in research related to TikTok (called Douyin in China), an emerging and increasingly popular social media ([Vinerean & Opreana 2021](#)). The app reportedly has more than 800 million active users worldwide, making it one of the most downloaded apps in the Google and Apple app stores ([Cervi 2021](#); [Savic 2021](#)). Although TikTok is a trending app on a global scale, there is limited analysis related to transcultural engagement in cosmopolitanism studies. Existing research has focused on digital entertainment platforms such as Netflix and Spotify ([Elkins 2019](#)). As such, it is necessary to investigate digital cosmopolitanism on social media, especially TikTok.

METHODOLOGICAL INTERVENTION IN COSMOPOLITANISM STUDIES

As far as the methodology of cosmopolitanism studies is concerned, previous studies exist with a large number of theoretical claims about what cosmopolitanism is and what it is not ([Lindell 2014](#)). Most concepts of cosmopolitanism originate from the Kantian idea, which in turn derives from the original Stoic philosophy. Due to its western genealogy, insufficient attention has been given to non-western parts of the world in the existing literature ([Delanty 2018](#)). Given this problem, researchers have explained cosmopolitanism through world varieties of cosmopolitanism, such as Sugimoto (2018) who makes an argument for cosmopolitanism in the Japanese concept of Kyosei (きょうせい), and [Rofel (2018)](#) who discusses cosmopolitanism in the Chinese notion of Tianxia (天下). The major structural shifts in globalization and transnationalization have led researchers to climb down the ladder of theoretical abstraction and venture into the difficult task of cosmopolitanism in quantitative research. However, researchers often rely on secondary data from survey companies, e.g. World Values Survey, or online surveys, which fail explicitly at measuring cosmopolitanism ([Roudometof 2018](#)). Therefore, the field of cosmopolitanism is in deep need of a methodological solution to understand contemporary digital cosmopolitanism.

Regarding the above issues, this study intends to understand digital cosmopolitanism by examining western and non-western transcultural engagement on TikTok through text mining analysis. It focuses on the following research questions: (1) What constitutes digital cosmopolitanism on social media? (2) How do street artists digitally increase the transcultural engagement with the cosmopolitan community on social media? (3) How can text mining analysis help broaden the methodology of cosmopolitanism studies? Although previous studies have involved investigations of street art and aesthetic and digital cosmopolitanism, they have focused on the interpretations of transcultural engagement in aesthetic and digital cosmopolitanism. This study further classifies the types of transcultural engagement, and clarifies that different types have different effects on transcultural engagement with cosmopolitan communities on social media. Compared with previous studies, all of the above helps this study contribute to a better understanding of the role of street art, street artists and communities in digital cosmopolitanism.

Method

The study used text mining to collect and analyze short videos on the street art of [Jingxuan Peng](#) on TikTok and the corresponding engagement responses. The study focuses on the engagement with Jingxuan Peng's short videos on TikTok through mentions and likes, as well as the text associated with her videos. Jingxuan Peng, a 25-year-old student studying in France, plays the Guzheng (a Chinese plucked zither) in Hanfu (the traditional style of clothing worn by the Han people in China) on the streets of Europe. This performance leads to the popularity of her street art in Europe including Switzerland, France and Spain, which is the basis of her aesthetic cosmopolitanism. In addition, while playing she records her performance and later uploads it to different platforms (e.g. TikTok, Bilibili and YouTube), which further sparks her global popularity. As of December 7, 2021, she had 9,170,000 followers and her short videos received

more than 110 million likes on TikTok. According to TikTok's reports, Peng was recognized as one of the Top 10 Art Promotion Officials on TikTok in 2020. Also, she was awarded the title of Ambassador of International Students by Campus France (the French agency for the promotion of higher education and international mobility), and was invited to perform at the United Nations on World Mother Language Day. She is considered not only as a street artist, but also a transcultural communicator and innovator. Hence, the investigation of her short videos helps to understand how exotic street art can shape transcultural engagement in digital cosmopolitanism.

According to the Information Resources Management Association in the United States (2018), using various text mining techniques to monitor social media texts is an indispensable tool. The existing literature highlights three reasons for employing text mining in academic research: (1) extracting unknown and valuable information from text data; (2) discovering patterns by classifying texts; (3) reducing time and efforts for data exploration (Weiss et al. 2020). Consequently, supported by the methodological framework for text mining on social media (Salloum et al. 2017), the coding process was carried out in the following manner. First, the text data including caption words, hashtags, mentions and comments in TikTok posts were extracted for tokenization, a process that separates text into a representation of each word, known as a token. Subsequently, the tokens were filtered to remove stop tokens such as definite articles and pronouns, which are not meaningful for the research analysis. Afterwards, the remaining tokens became the basis for the thematic categories. Finally, the engagement responses were analyzed according to different thematic categories to understand the transcultural engagement in digital cosmopolitanism.

Regarding engagement responses, previous research supports that likes, comments and shares as the three key predictors of social media engagement (Kim 2016). Likes are interpreted as followers accepting the views of the post and holding positive attitudes (Antonopoulos et al. 2016). Comments can be considered as a communication tool that helps to understand followers in advance, as followers need to spend more energy expressing their thoughts, attitudes and feelings when commenting than simply clicking the liking button (Lev-On & Steinfeld 2015). Shares require higher activation energy, and elicit more feedback by allowing others to continue sharing in the same follower communities (McClain 2019). Accordingly, this study considers the levels of social media engagement from low to high as liking, commenting and sharing respectively. Hence, this study used them as three variables to code the levels of transcultural engagement in digital cosmopolitanism.

Table 1.   Coding variables and definitions

Engagement Levels	Variables	Definition	Reference
Low	Liking	It indicates that the view of street artists is received by transcultural communities and they have positive attitudes.	Antonopoulos et al. 2016
Medium	Commenting	It means that street artists and transcultural communities have an active and positive relationship.	Lev-on & Steinfeld 2015
High	Sharing	It shows that street artists have a positive impact on transcultural communities and their subcommunities.	McClain 2019

Results

Overall, Jingxuan Peng has posted 244 short videos on TikTok so far. Among them, one short video was not related to street art and was excluded from the study. Therefore, a total of 243 short videos were analyzed in the study. On average, each short video has 340580 likes, 9779 comments, and 5789 shares, although there is a large divergence between the number of each for the least popular and the most popular videos as Table 2 shows. The detailed descriptive statistics were presented in Table 2.

Table 2.   Engagement with the videos

	N(videos)	Minimum	Maximum	Mean	Std. Deviation
likes	243	29000	2588000	340580	448851
comments	243	83	67000	9779	13930
shares	243	39	53000	5789	11180

By mining Peng's posts, the tokens were divided into three thematic groups: fully exotic, partly exotic, and a combination of local and exotic art (Please see Figure 1). Specifically, Group 1 contains songs identified as fully exotic art. These songs are featured by Chinese cultural characteristics and are likely unfamiliar to Westerners, as evidenced by their comments on these posts. Therefore, they are considered fully exotic art. This group includes songs such as 'Serenade of Peaceful Joy', 'Serenade of Peaceful Joy', 'He Yige', '# Liu Genhong Girl', 'Compendium of Materia Medica', 'Cao Cao', 'Pearl of the Orient', 'The Sea and the Sky', 'Wan Jiang', '# Peach Blossom Smile', 'Zen Rhythm', 'My Chinese Heart', 'Fahai', 'Unchained Melody', 'Dream Catcher', 'Happiness', 'Wukong', 'Moonlight', '# Immortal Sword', 'Fearless Warrior', and 'Under the Sea'. Group 2 contains songs identified as partly exotic art. These songs also have Chinese cultural characteristics, but they are more likely to be well known around the world because they have been translated into different languages such as English, French, German and Japanese. Hence, they are regarded as partly exotic art for digital cosmopolitans. This group includes songs such as 'The Butterfly Lovers', '#Jay Chou', 'Green Flower Porcelain', 'Dragon Fist', 'The Bund', 'Lonely Warrior', 'The Moon Where Are You', 'The Hottest Ethnic Trend', '# The Journey to the West', 'Sing a folk song to the Party', 'Jianghu', 'Huo Yuanjia', and 'Drunken Fist'. Group 3 contains songs that combine local and exotic art. These songs feature western cultural characteristics, but they are performed by Jingxuan Peng's Guzheng, presenting a combination of local and exotic art. This group includes songs such as 'Someone like you', '# Michael Jackson', 'Croatian Rhapsody', 'See you again', 'Les Jardins', '#Believer', 'Love You', 'Smooth Criminal', '#As You Wish', 'Rolling in the Deep', 'Richard Clayderman', 'Hey Jude', 'East meets West', '#Lavender', 'Provence', 'See of Flowers', 'Ten Thousand Gods', and 'Doraemon'. Here, given the transcultural engagement, the concepts of exotic and local are defined according to the cultural background of the street artist Jingxuan Peng and the western audience on the streets of Europe, which is an important basis for her worldwide popularity on TikTok, as previously mentioned.

The study was concerned to identify whether there was any relationship between the group of songs and the type of engagement. Thus, a one-way ANOVA test was performed. The final results are shown in Table 3. The results substantiate that thematic categories of short videos on street art have a significant effect on the liking, commenting and sharing behavior of transcultural communities in digital cosmopolitanism. In terms of liking, the result of Group 3 (Local & Exotic) is positive and significant (mean difference=773396, 617242), indicating that the combination of local and exotic art positively affects the liking behavior of transcultural communities in digital cosmopolitanism. Likewise, for commenting and sharing, the results of Group 3 (Local & Exotic) are positive and significant (mean difference=24398, 19585, 18682, 16717). That
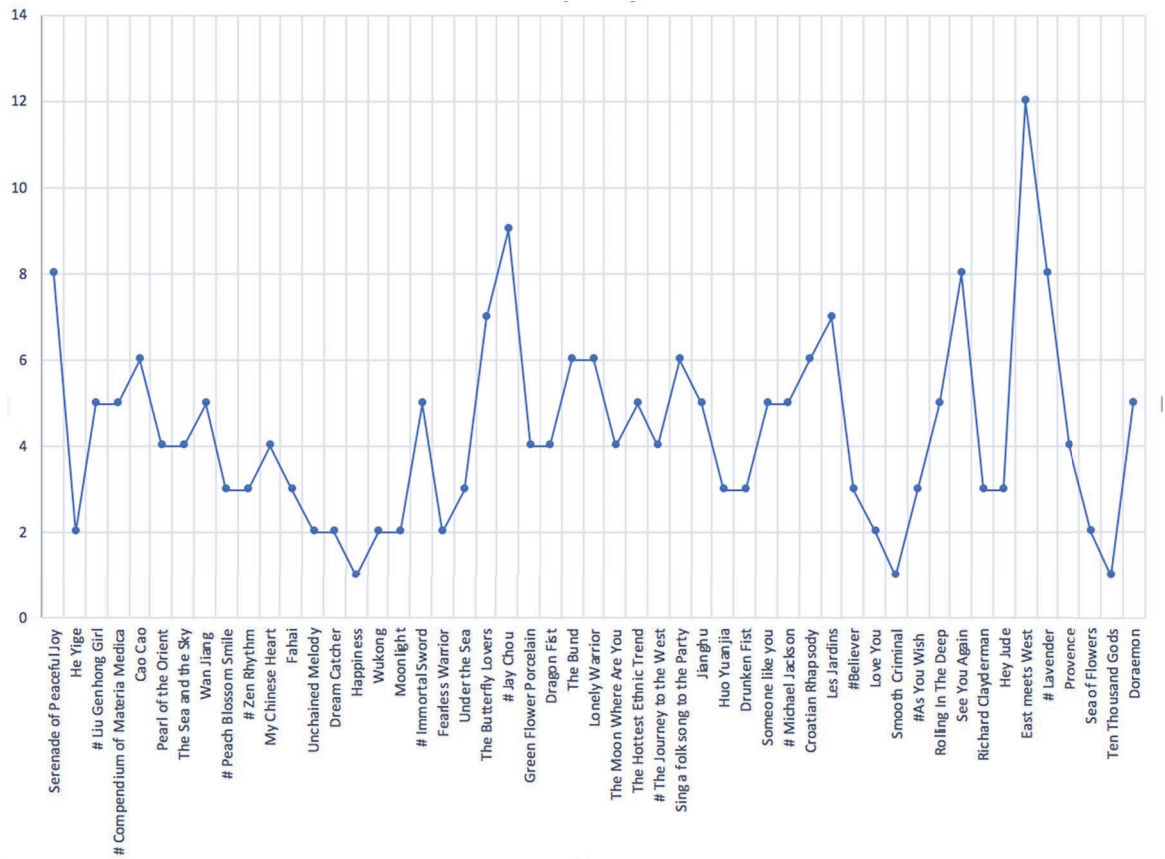
Figure 1.   The Frequency of Songs Mentioned in Peng's Posts

is to say, the combination of local and exotic art positively affects the commenting and sharing behavior of transcultural communities in digital cosmopolitanism. In addition, the results of mean difference (See Table 3) show that the combination of local and exotic art has the highest influence on the behavior of digital cosmopolitans, with partly exotic art having the next highest influence and fully exotic art having the lowest influence. To summarize, the results confirm that the combination of local and exotic art has the highest level of engagement for the transcultural communities in digital cosmopolitanism.

Table 3.   Corresponding engagement responses of digital cosmopolitans

Dependent Variable	(I) Group	(J) Group	Mean Difference (I-J)	Std. Error
Likes	Local & Exotic	Fully Exotic	773396*	102938
		Partly Exotic	617242*	102938
Comments	Local & Exotic	Fully Exotic	24398*	3142
		Partly Exotic	19585*	3142
Shares	Local & Exotic	Fully Exotic	18682*	2557
		Partly Exotic	16717*	2557

*. The mean difference is significant at the 0.05 level.

Discussion and conclusion

DIGITAL COSMOPOLITANISM: SOCIAL MEDIA AND SOCIAL INTERACTIONS

To answer the first research question, the statistically significant results of likes, comments, and shares and their relationship to songs in Group 3, local and exotic, suggest that TikTok helps street artists engage with the digital cosmopolitan communities, which relies heavily on the nature of social media. Social media is seen as bringing a new way of interacting, communicating and participating in online communities, so its strengths are interactive and social (Barger et al. 2016). Compared with street art performances in public places, with the help of social media, street art can be seen by more people without the limitation of space and others as mentioned earlier. Among social media, TikTok has its distinctive strengths. The short video format is friendly to street art performances. This study clearly presents the best parts of Jingxuan Peng's performances, from her typical Chinese clothes and music to the reactions of the live audience and more. All of these have led to more discussion in digital cosmopolitan communities.

> Example 1:
> 'Playing the Guzheng is really painful. I played it before and I did not stick to it because it hurts.'
> 'When your fingers are calloused, you will be fine, and it won't hurt for a long time.'
> 'Maybe you don't have nails? If you use nails to play the Guzheng, how will it hurt?'

For instance, Example 1 is from the comments for the song 'Lonely Warrior', (from Group 2, partly exotic) which is also one of the typical discussions in Peng's comments. The example shows that they discuss how painful it is to play the Guzheng. They did not know each other before, but the topic of the pain of playing Guzheng brought them together and led to a heated discussion on TikTok. Other topics including wearing veils and music content have also sparked social connections in digital cosmopolitan communities. Besides, the unsolicited questions and Peng's responses in the comments added to the social connection. For example, Peng often asks people in the comments how they feel (e.g. 'This is an adaptation. How do you like it? Please hear it all because there are layers of emotion'). This example question has 443 separate responses in the comments of 'Lonely Warrior', which people also share with their friends to further increase the scope and number of social connections. That is to say, social media like TikTok play an important role in the social connection between street artists and their audience in digital cosmopolitanism.

Furthermore, social interactions in digital cosmopolitan communities can be also developed through hashtags and mentions, which are distinctive functions of social media. Past literature supports the use of hashtags and mentions to predict people's perceptions of social media communication (Buarki & Alkhateeb 2018). In the study, Peng often uses key words as symbols to link digital cosmopolitans through the identification of symbols through hashtags such as #Guzheng, #cultural heritage, and #promoting folk music. Hashtags are described as widely used symbols on social media around the world (Page 2012). With the help of hashtags, the visibility of posts can be increased through relevant searches. As such, it is recommended that street artists apply hashtags and spread their street art on social media to increase social connections in digital cosmopolitanism. Moreover, this study reveals that Peng's audience often uses mentions in the comments and actively shares posts with others (See Example 2).

> Example 2: '@Qkk Do you know how to play?'
>   '@ne @Yunzhe Truly amazing!'
>   '@ღ°Wanfeng I can do it as well!'

Example 2 shows the comments of Peng's audience on the song 'Green Flower Porcelain', (from Group 2, partly exotic). Many audience members who comment, as the three in Example 2 did, often use mentions to get their friends involved in the comments. The mentions then link to more people participating in the

discussion, which gives rise not only to social connections but also to electronic word-of-mouth. Electronic word-of-mouth is characterized by a many-to-many electronic communication process that delivers a large amount of information to a large audience in a timely manner. Namely, in the study, Peng's audience connects with their friends via mentions and strangers via comments on Peng's street art on TikTok. These friends and strangers then connect to more friends and strangers through mentions and comments. These social connections are constantly cyclical, which ultimately lead to the popularity of Peng's street art on social media. In short, this study supports the idea that TikTok can help street artists increase the visibility of their street art and engage with digital cosmopolitan communities through social interactions.

TRANSCULTURAL ENGAGEMENT: MEDIA CONTENT AND AESTHETIC APPRECIATION

Regarding the second question, the study shows that social media content has a differential impact on transcultural engagement with digital cosmopolitanism. Previous studies have noticed the different impacts of social media content (Chahal & Rani 2017). Dolan et al. (2019) state that rational appeals in social media content are superior in promoting active and passive engagement of social media users, while emotional appeals facilitate passive rather than highly active engagement behavior. As mentioned earlier, there is limited analysis of the different effects of social media content from the perspective of street art in digital cosmopolitanism. Also, different types of social interaction are under-investigated in the research on street art in digital cosmopolitanism. For this reason, this study analyzed the thematic content of Peng's posts on TikTok. The results show that Peng's short videos can be classified into three thematic groups: fully exotic, partly exotic, and a combination of local and exotic art. The study further finds that the combination of local and exotic art has the highest level of engagement in digital cosmopolitan communities while fully exotic art has the lowest level.

Overall, the study indicates that aesthetic appreciation is considered to explain the differences in the level of engagement. Appreciating an artwork requires the appreciator to have some appropriate response to the artwork, to its characteristics, or to what it represents. According to Rings (2019), art appreciation takes place across cultural boundaries and is referred to as cultural talk. That is to say, the street artwork presented by artists is featured by artists' own cultural characteristics. Appreciating artwork requires the appreciator to become familiar with these cultural characteristics by perceiving or otherwise experiencing the artwork in a manner appropriate to its medium. As such, the appreciator can recognize these cultural characteristics and appreciate the artwork.

> **Example 3:**
> 'In foreign countries, play some western classical music from time to time to promote the charm of Chinese instruments.'
> 'Play more European and American music they know in order for them to appreciate the charm.'
> 'Occasionally an English song to the French to have some resonance.'

For instance, Example 3 exemplifies the comments from 'See you again', a song in Group 3, local and exotic. These comments reveal that all people think that Peng can play more western classical music through the Guzheng, and agree that by doing so, Westerners can better recognize their native culture and thus more easily appreciate Peng's street art. For this reason, there are differences in the level of transcultural engagement in digital cosmopolitanism. Also, aesthetic appreciation accounts for the low level of transcultural engagement in fully exotic art. In other words, Jingxuan Peng's short videos 'Serenade of Peaceful Joy', 'Cao Cao', 'Wan Jiang', and other unknown Chinese folk songs with Chinese cultural characteristics are fully exotic to Westerners. In this case, it is difficult for them to establish transcultural engagement in digital cosmopolitanism. Therefore, this study implies that both social media content and aesthetic appreciation positively affect transcultural engagement in digital cosmopolitanism.

Last but not least, in terms of the third research question, this study demonstrates that text mining techniques help in analyzing cosmopolitanism studies, especially digital cosmopolitanism studies. Specifically, in addition to surveys, text mining analysis can help collect first-hand data in digital cosmopolitanism studies, and be explicit in measuring digital cosmopolitanism through transcultural engagement. In conclusion, it is helpful to apply text mining analysis to broaden the methodology of cosmopolitanism studies.

THEORETICAL AND PRACTICAL IMPLICATIONS

Theoretically, this study makes a three-fold contribution to the existing literature. First, this study adds to the extant literature by identifying how street artists digitally use street art to manage digital cosmopolitanism from the perspective of media and transcultural communication. Previous research has concentrated on exploring graffiti as performative cosmopolitanism from a political perspective (Christensen 2017). This study thus contributes to further discussion of the currently limited analysis of music as aesthetic cosmopolitanism from a media and transcultural perspective. The study supports previous studies (Formosa et al. 2014; Christensen 2017; de Wilde et al. 2019) that openness and connectedness are reasons for digital cosmopolitanism, and it further reveals that aesthetic appreciation is also important for transcultural engagement with street art in digital cosmopolitanism.

Second, this study particularly focuses on how to increase transcultural engagement in digital cosmopolitanism. Existing research calls for a reconceptualization of cosmopolitanism in the digital age (Leurs & Hirata 2020). As transcultural engagement is central to aesthetic cosmopolitanism (Rings 2019), this study further explores the role of art, artists and communities in digital cosmopolitanism. Previous research has argued that digital technology has not enabled communities to cross borders and form cosmopolitanism (Zuckerman 2014). However, the study confirms that social media helps street artists to positively engage with street art for the communities in digital cosmopolitanism, which is inconsistent with the previous findings. Instead, it supports that social media engagement such as liking, commenting, and sharing can lead to connections with other groups that are different from ours, and enable cosmopolitan tendencies.

Third, the use of text mining analysis in this study provides a methodological framework for related studies. Previous studies have applied case studies, ethnography, hypotheses, etc. to research methodology, while analysis using text mining has been limited (Cicchelli et al. 2019). Therefore, this study opens up a new methodological dimension to the analysis of street art in digital cosmopolitanism.

Also, this study provides insights for street artists in the age of the Internet on how to increase the acceptance of their performance. That is to say, street artists are encouraged to use TikTok to present their performances along with their street art. This study supports that using local and exotic art on TikTok has the highest level of transcultural engagement of street art in the digital cosmopolitan community. Street artists can manage their thematic content of street art to further increase the visibility and engagement in community. Finally, the use of TikTok can help provide a solution to limited space and management norms that have been a problem in previous street art performances. It can help reduce the tension between street artists and local perceptions of street art in community and policy discourses.

LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

The study is subject to several limitations, which provide insights for future research. The first limitation is that this study exemplified street art in digital cosmopolitan through Jingxuan Peng's short videos on TikTok. Future research could consider exploring different street art and social media platforms to test the findings of this study and create a comprehensive framework for street artists' transcultural engagement with street art in digital cosmopolitanism. Second, this study is restricted to the investigation of transcultural

engagement based on liking, commenting and sharing behavior. Previous research indicates that empathy's ability also motivates cosmopolitan behavior (Faulkner 2017), so future research could consider including the addition of empathy analysis of communities in transcultural engagement. Moreover, another limitation is that this study analyzed street art with Chinese characteristics in the West. In future research, it will be interesting to compare street art with western characteristics in eastern countries and street art with eastern characteristics in western countries to see how the transcultural engagement with street art in digital cosmopolitanism differs.

Acknowledgements

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