



Social-media-popular place and its media architecture: Investigating place identity of Grant-Tang Mall through online reviews

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ABSTRACT

In the new media era, media architecture often serves as attractive urban spectacles and is widely represented and promoted on social media. Meanwhile, images and videos on social media also have an impact on the place identity and media architecture in the urban experience. This study argues that social media expands the conceptual scope of media architecture, aims to explain the mechanism of the impact of social media on online/offline media architecture, and designs a methodological framework for analyzing the mechanism. Taking Grant-Tang Mall, a pedestrian street popularized by media architecture on social media, as a case study, the study analyzes the impact of social media on place branding, cultural space reproduction, and placemaking through media architecture. The findings show that social media promotes the online representation and dissemination of media architecture. Social media also combines cultural offline activities to promote citizen participation, shape collective identity, and transform offline media architecture for placemaking.

Keywords

place identity, social media, media architecture, place branding, placemaking.

CSS Concepts

• **Applied computing**~Arts and humanities~Architecture (buildings)~Computer-aided design

We planned a night out with friends in the historic district of Xi'an, China. At home, we used Douyin (like TikTok) to search for recommended short videos of the places we wanted to visit. At this time, the most browsed video came into view. This is the Grant-Tang Mall, the most famous pedestrian street in Xi'an. The video shows a roly-poly lady wearing a Tang suit dancing, and the media architecture behind her are colorful and beautiful. Very good! Just go here! We started to continue browsing the tour maps, recommended routes and check-in hotspots on Dianping (like TripAdvisor) and the Red (like Instagram). We checked the latest reviews, and the most recent one said that there was a folk music performance held here! Highly recommended! Our friend is a huge music fan and couldn't refuse this kind of activity, so we added a new itinerary to visit the folk music performance. When we arrive at the historic district, there are many activities here, combined with various media architectures. The offline visiting experience is more exciting than watching the online videos! We all took a lot of photos and videos and are going to upload

them to Weibo (like Twitter) and Douyin (like TikTok), hoping to recommend them to more friends!

1. INTRODUCTION

With the development of social media platforms and digital technology, social-media-popular places are emerging in many countries [9,6,16,17,22,23]. Through the text, images, and short videos of online reviews on social media platforms, those popular places spread rapidly, attracting a large number of people to take photos and visit. This becomes a unique phenomenon with civic spectacle [20]. At the same time, a large amount of online exposure has also affected and changed the local physical and social environment. Media architecture often serves as an eye-catching urban spectacle. Because of its landmark, interactivity, aesthetics, and other characteristics, it is widely represented and promoted on social media. Media architecture has promoted the production of many social-media-popular places. However, few studies have focused on the impact of social media on media architecture.

In the new media era, social media has expanded the concepts of media architecture. The media architecture mentioned in this study has two meanings: online media architecture and offline media architecture. Online media architecture refers to user-generated content and Geo-tagged posts which represent media architecture on

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social media platforms, including images, videos, texts, and other social media data. Offline media architecture refers to the physical entities of urban screens, media facades, interactive multimedia installations, etc. in physical public spaces. Media architecture influenced and spread by social media serves as an “immense accumulation of spectacles. Everything that was directly lived has moved away into a representation”[8]. Online media architecture and offline media architecture have mutual influence mechanisms under the influence of social media and people’s virtual imagination and physical experience behaviors. Therefore, on the one hand, how is offline media architecture represented on social media platforms, widely disseminated, and transformed into online media architecture? On the other hand, how does online media architecture in these social-media-popular places affect offline media architecture, cultural space reproduction and placemaking?

As digital media technology becomes increasingly embedded in people’s daily lives, scholars are increasingly aware that place identity and sense of place are not only formed through onsite experience. Place identity which is influenced by digital media cannot be ignored [11]. Place identity has three aspects: meaning, activity, and form [15,18,19]. Offline media architecture, as a special form for people to experience and perceive in public spaces, together with place meaning and local activity, has an impact on people’s perception of place identity. Moreover, Online media Architecture affects people’s imagination and meaning of places through social media posts. Through digital media, it builds the digital place identity rooted in the actual places of daily life [21]. The digital place identity contributes to form unique place marketing and place branding strategies. For example, using online media architecture as attractive hotspots to spread on social media platforms. However, the research question that how social media affects (digital) place identity through online/offline media architecture is not well discussed yet.

Therefore, this study attempts to explain the phenomenon that social media has influenced social-

media-popular place and its media architecture in the new media era. It describes the influence mechanism, explore and propose analytical research methods and framework, and finally verify it through an empirical case study. This study selects Grant-Tang Mall, a pedestrian street in Xi’an, China, as the empirical study case because it has many unique media architectures. Due to the media architectures, Grant-Tang Mall ranked as the most popular hotspot on Douyin (the Chinese version of TikTok) in 2019 [7]. This study combines the proposed influencing mechanism and analytical framework to analyze the research questions of how social media influences the place’s online/offline media architecture, what are the aspects of place identity, and how is place identity manifested in media architecture. This study further explores and reveals the process of cultural consumption, place branding, and cultural space reproduction.

2. RESEARCH DESIGN

2.1 Mechanics

There are two processes of the mechanics of social media’s impact on media architecture, from offline to online and from online to offline (Figure 1).

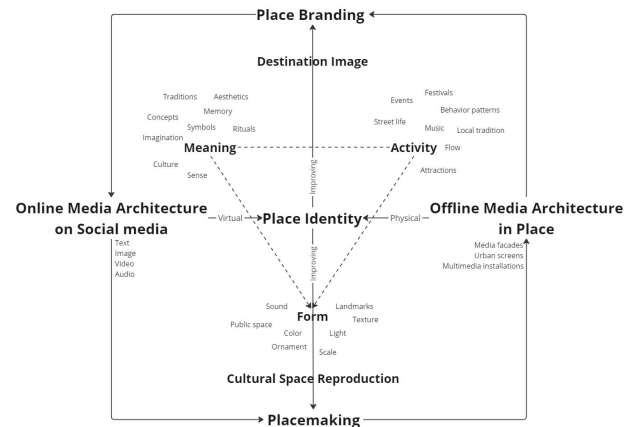


Figure 1: Mechanics of social media’s impact on

media architecture (Image by author)

Mechanics of the representations of media architecture on social media (From offline media architecture to online media architecture):

The offline media architecture in physical places is aesthetically filtered, stylistically decorated, carefully designed, and selectively portrayed in the online media architecture on social media. For example, images and posts on social media are highly aestheticized and attractive to showcase the “sophisticated beauty and good vibes” posted by “happy, healthy, and stylish” people [4,6]. The offline media architecture in physical places is reshaped by people’s collective imaginaries and is presented as a city/place/destination image in the online media architecture on social media. Physical places undergo a transformation influenced by the collective imaginaries of the people who engage with them. This transformation is realized through digital representations and narratives created in the virtual realm of social media platforms, where cities, places, and destinations are widely portrayed, discussed, and shared [10,13,20]. The offline media architecture in physical places is shared and branded, represented, and disseminated by people to the online media architecture on social media. For example, textual and visual online exchanges can play an important role in increasing exposure and influencing how a place gains iconic status [12]. The offline media architecture in physical places is represented through place identity, sense of place, and the way users associate themselves with online media architecture on social media. For example, social media participants view their check-ins as part of their online self-presentation [5,21]. Through the three dimensions of meaning, activity, and form combined with the self’s offline spatial experience, the users posting on social media in the form of text, video, and images can be seen as a re-creation of place.

Mechanics of the representations feedback into uses of media architecture (From online media

architecture to offline media architecture):

The online media architecture on social media influences people's destination interests and preferences for visiting and consuming offline media architecture in physical places. Virtual places on social media have a significant impact on people's destination interests and preferences, which in turn influence their decision to visit and engage with physical places through inspirational content and peer recommendations [1]. The online media architecture on social media has changed the mobility and activity of people when experiencing offline media architecture in physical places. When travelers engage with digital representations of destinations, they often plan their itineraries, activities, and points of interest based on what they encounter online. These platforms influence behavior by providing travelers with rich insights through many suggestions, such as check-ins and city flaneur [2]. The online media architecture on social media spurs commercial gentrification and causes offline media architecture in physical places that change their aesthetics to appeal to gentrifiers. For example, the gentrifiers use social media to express their status, often creating posts that serve as advertisements for fashion and highbrow institutions. These uneven representations can have a significant impact, changing the aesthetics and composition of shopping streets [4,6,17,22]. The online media architecture on social media encourages people to comment and participate in the co-creation of offline media architecture in physical places and placemaking activities. The online media architecture on social media acts as a catalyst for engagement and participation, motivating individuals to not only passively consume content, but to actively contribute through commenting, co-creation, and placemaking in the context of physical places. Social media platforms facilitate placemaking initiatives by enabling users to contribute to the development and transformation of physical places by advocating for activities, events, or improvements[14]. The online media architecture on social media creates and develops a new sense of place and place identity. Social media enables people to share

stories, memories and experiences related to place. These shared narratives can contribute to the development of place identity and sense of community. For example, the use of social media related to the urban sphere promotes a renewed focus on place, fosters awareness of local socialization opportunities, and enhances users' sense of place and community [10].

2.2 Methodology and framework

Based on the above description of the mechanism of online/offline media architecture transformation, this study proposes a methodology and framework to further investigate the mechanism. There are three categories of social media data: content (text, image, audio, and video), structure (social linkages among users), and context (spatial and temporal backgrounds) [3]. Combining these different categories, a framework is built to analyze the mechanisms by which social media influence media architecture (Figure 2).

For user-generated content, the image information can be analyzed by applying algorithms such as Google Cloud Vision API to analyze the labels, objects, text, properties, color, etc (Figure 3). For text information, algorithms such as topic modeling can be applied to analyze posts' topics, emotions, etc. For audio information, platforms such as Google Audioset can be applied to analyze it. Video information can be transformed into images, text, and audio. Based on the above analysis, we can finally derive the visual and text features based on the three elements of place identity: meaning, activity, and form, which can be used for the subsequent analysis of place identity and place branding.

For post structure, the number of likes, comments, shares, follows, or mentions can reflect whether a place is popular and widely marketed. Network analysis can be used to analyze the actors, and actions in a place branding process.

For post context, the temporal, social, and spatial links can be used as background information to assist in the

study of place branding, placemaking's geographic distribution, timeframe, and so on.

Ultimately, through the above methodological framework, we try to explain the following research questions about mechanisms: What aspects of online media architecture are popularized through social media? How does online media architecture induce popular places on social media? What aspects of offline media architecture are transformed by social media? How does offline media architecture contribute to cultural space reproduction and placemaking?

3. CASE STUDY

3.1 Study case and social media platform

As the top one of the top 10 most popular tourist attractions on Douyin (the Chinese version of TikTok) [7], Grant-Tang Mall has become one of China's exemplary pedestrian streets, utilizing the space along a nearly 2-kilometer-long pedestrian street to its fullest. Centered around Tang culture, scenic and cultural nodes are set up every few dozen meters, incorporating interactive experiential activities and utilizing colorful lighting to create a diverse range of media architecture, public spaces, and nighttime scenery.

We selected Weibo (one of the famous Chinese social media similar as Twitter) as the social media platform for the study. The platform has Chinese check-in posts about Grant-Tang Mall, which document the visitors' experiences. These online posts are located under the destination name "Grant-Tang Mall", which represents the check-in posts when people visit the public places of Grant-Tang Mall pedestrian street. Meanwhile, in addition to the textual content, there are many representative photographs taken in the place, and these photos, featuring various scenes and objects, can also reflect people's sense of place and place identity to a certain extent.

3.2 Text data analysis

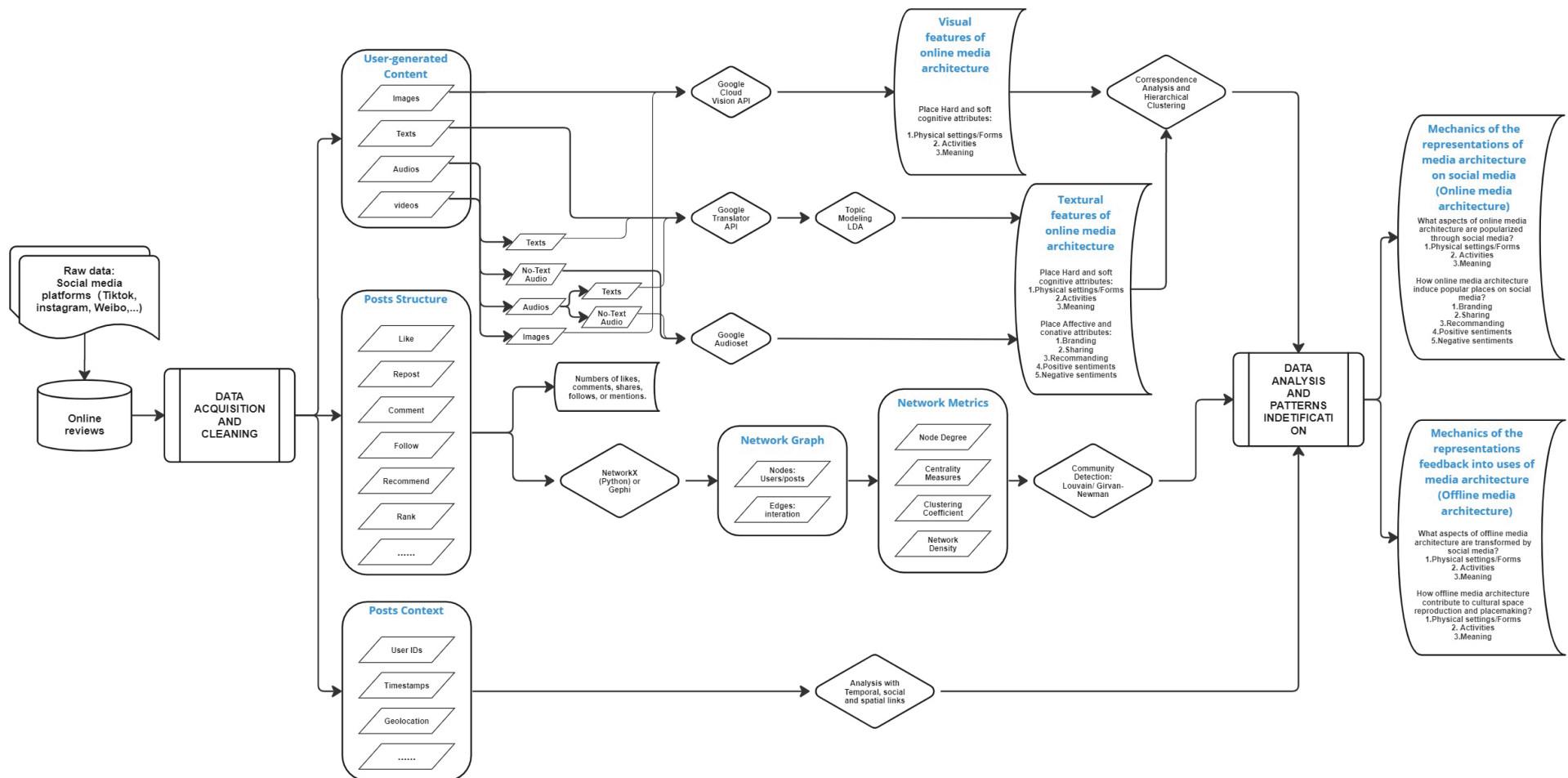


Figure 2: The methodology and framework to analyze mechanisms of media architecture (Image by author)

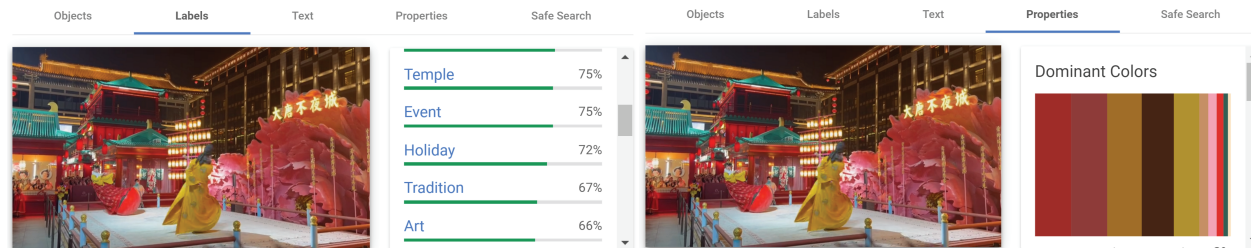


Figure 3: The analysis of visual features of online media architecture using Google Cloud Vision API (Image by author)

Based on the above methodological framework, it can be concluded from the results of the analysis that the top high-frequency words can be divided into three categories of related themes. Firstly, there are descriptions of the unique characteristics of the local attractions, such as “Hanfu”, “time travel”, “acrobatics”, “cuisine”, “performances”, “lights”, “night views”, “history”, “antique style”, “music”, and “commercialization”. These words constitute the place identity of the destination and have certain uniqueness that sets it apart from other places. Secondly, there are descriptions of personal emotions towards the attraction, such as “the most beautiful,” “reunited,” “really great,” “happy,” “lively,” “prosperous,” “good-looking,” and so on. These words reflect people’s sense of place towards the destination, which can be both positive and negative. Thirdly, there are other descriptive words related to location information, such as “Xi’an”, “time”, “Weibo”, “photography”, “video”, “check-in”, “experience”, and so on, which supplement the analysis.

3.3 Image data analysis

Based on the above methodological framework, different categories of features, such as people, trees, lights, buildings, signboards, etc., are identified in the images of the posts, and the percentage of these features in the images can reflect the type of local media architecture to a certain extent.

From the analysis results, it can be concluded that people, signboard installations, furniture such as seats and lights are the features with the highest percentage. Tourists showed high attention to these features, which also constituted important elements for popular photo spots. Examples include the performers in the people category, such as the acrobatic roly-poly lady wearing a Tang suit, the floating Terracotta Warriors, stone men, and Tang Dynasty female warrior patrols. In the media architecture and installations category, the Tang Dynasty hero figures, colorful signs, and poetic lights were also important features.

3.4 Mechanics analysis

The concept of place identity or sense of place is defined by three aspects: meaning, activity, and form [15,18,19]. In the case of Grant-Tang Mall, the form of media architecture is predominantly reflected in offline media architecture, including interactive installations, traditional Tang culture-inspired light fixtures, urban screens, media facades, and public projections. These physical forms integrate sensors and screens, sonic and visual elements, and various traditional cultural performances, bringing new dimensions of meaning, local attraction, and vitality to the place. Consequently, people have developed new emotional perceptions of the place and more visitors are attracted to the place to experience and spread its unique characteristics through online media architecture. The exposure on social media platforms has attracted more tourists to experience the popular sites offline, further influencing offline media architecture. Therefore, media architecture as a form of place identity carrier has a mutual impact and recreation with place identity.

Place marketing or city branding relies on the creation of unique identities, which is achieved by using offline media architecture and traditional cultural activities as the basis of identity. The promotion of the place on social media platforms through online media architecture. For example, the dance performance by roly-poly lady wearing a Tang suit at Grant-Tang Mall has received millions of views on Douyin [7], driving its popularity and even contributing to the tourism industry of Xi’an.

Cultural space reproduction has become a new issue in the era of social media marketing. However, due to the marketing on social media platforms, the original space and the new popular space have formed spatial heterogeneity. The blending of these two spaces and the reproduction of cultural space have become new issues, and the renovation and placemaking of historical urban areas have become important research topics. Grant-Tang Mall also suffers from over-tourism problems such as difficulties in matching service facilities with the flow

of people and traffic congestion.

Compared to ordinary places, social-media-popular places have a more complicated process of online and offline transformation. In the era of massive dissemination of short videos and images, single static offline media architecture is difficult to attract instant attention online. According to the data from Douyin, the dance video that ranks first in views is an important factor in attracting people to the place. The combination of cultural activities and offline media architecture can better promote the place on online social media, and the participation of the public in online media architecture through reposting and blogging strengthens the imagination and recreation of the place, attracting more people to visit and experience the place offline.

4. DISCUSSION

The purpose of this study is to explain the phenomenon that social media influences media architecture in the new media era, hoping to sort out the influence mechanism, exploring and proposing an analytical research methodology and framework, and finally validating this framework through a case study, Grant-Tang Mall. Despite its success as a top-ranked commercial tourist spot on Douyin, sentiment analysis of comments on Grant-Tang Mall showed a 13.55% negative emotional response, with feelings of overcrowding, excessive commercialization, and regret being prominent. This suggests that there are areas for improvement at the site. Meanwhile, due to the bias of specific groups of Weibo users, only some groups of people were considered in the research, and the elderly and children who are not good at using smartphones were not included in the analysis. In terms of case selection, the single case of Grant-Tang Mall is not enough to fully validate the influence mechanism and framework, and due to its many special media architectures, it is not enough to show that media architecture is more likely to be noticed, posted on social media, and widely disseminated than other physical spaces and landmarks. Additional cases need to be added as controls for later research. For future research, our findings can be used to guide strategies

such as utilizing social media-induced placemaking and provide support for future research to develop more detailed structured interview guidelines.

5. CONCLUSION

In the new media era, the study of media architecture cannot ignore the influence of social media and online promotion on it. This study aims to explain the influence mechanism of social media on media architecture, which expands the connotation of media architecture. Starting from the transformation loop of online/offline media architecture: offline media architecture being represented as online media architecture on social media, and online media architecture in turn influencing the use of offline media architecture, a subsequent research framework and methodology are proposed. The case study Grant-Tang Mall is selected for empirical research, focusing on the analysis of online/offline media architecture and its social-media-popular place, including place identity, place branding, placemaking.

We find that social media plays an important role in the online communication, promotion of media architecture, and place branding of the place. The high-frequency words and themes in the posts represent the visitors' place identity of the area, and the textual themes have a high degree of overlap with the features in the images. Compared with the offline media architecture without activities and interactions, adding local traditional activities and exploring traditional culture can make both online and offline media architecture more attractive, creating an internet influencer effect. This study verifies that social media facilitates the process of online place branding of media architecture and contributes to offline cultural space reproduction and placemaking. In future research, the phenomena and mechanisms investigated in this study will hopefully be translated into social media-induced placemaking, urban design or planning methodologies and strategies in subsequent studies, which will provide new ideas for urban research in the age of digital media (Figure 4).



Figure 4: Media architecture and hotspots of Grant-Tang Mall (Image by author)

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REFERENCES

- [1] Abbasi, A., Schultz, C., Ting, D., Ali, F., Hussain, K., 2022. Advertising value of vlogs on destination visit intention: the mediating role of place attachment among Pakistani tourists. *Journal of Hospitality and Tourism Technology* 13, 816–834. <https://doi.org/10.1108/JHTT-07-2021-0204>.
- [2] Arranz-Lopez, A., Soria-Lara, J., 2022. ICT use and spatial fragmentation of activity participation in post-COVID-19 urban societies. *Land Use Policy* 120. <https://doi.org/10.1016/j.landusepol.2022.106302>.
- [3] Bai, N., 2023. A+BE | Architecture and the Built Environment, No. 17 (2023): Sensing the Cultural Significance with AI for Social Inclusion. <https://doi.org/10.7480/ABE.2023.17>.
- [4] Boy, J.D., Uitermark, J., 2017. Reassembling the city through Instagram. *Transactions of the Insti-*

- tute of British Geographers 42, 612–624. <https://doi.org/10.1111/tran.12185>
- [5] Burgos-Thorsen, S., Munk, A.K., 2023. Opening alternative data imaginaries in urban studies: Unfolding COVID place attachments through Instagram photos and computational visual methods. *Cities* 141, 104470. <https://doi.org/10.1016/j.cities.2023.104470>
- [6] Chang, H., Spierings, B., 2023. Places ?for the gram?: Millennials, specialty coffee bars and the gentrification of commercial streets in Seoul. *GEOFORUM* 139. <https://doi.org/10.1016/j.geoforum.2023.103677>
- [7] China Daily. 2020. Douyin releases 2019 data report: Xi'an Grant-Tang Mall becomes the most popular attraction of the year. Retrieved from <https://cn.chinadaily.com.cn/a/202001/10/WS5e17e25aa31099ab995f6791.html>.
- [8] Debord, G., 2010. *The society of the spectacle*, Reprint. ed. Black & Red [u.a.], Detroit, Mich.
- [9] Fan, T., Lin, Z., 2022. Toward Tourists-Media-Cities Tourism: Xi'an as a Wanghong City. *SUSTAINABILITY* 14. <https://doi.org/10.3390/su141911806>
- [10] Gatti, F., Procentese, F., 2021. Experiencing urban spaces and social meanings through social Media:Unravelling the relationships between Instagram city-related use, Sense of Place, and Sense of Community. *Journal of Environmental Psychology* 78, 101691. <https://doi.org/10.1016/j.jenvp.2021.101691>
- [11] Halegoua, G.R., 2019. *The digital city: media and the social production of place*, Critical cultural communication. New York University Press, New York.
- [12] Han, J., Bae, S., 2022. Roles of authenticity and

- nostalgia in cultural heritage tourists' travel experience sharing behavior on social media. *Asia Pacific Journal Of Tourism Research* 27, 411–427. <https://doi.org/10.1080/10941665.2022.2075776>
- [13] Huang, J., Obracht-Prondzyska, H., Kamrowska-Zaluska, D., Sun, Y., Li, L., 2021. The image of the City on social media: A comparative study using “Big Data” and “Small Data” methods in the Tri-City Region in Poland. *Landscape and Urban Planning* 206, 103977. <https://doi.org/10.1016/j.landurbplan.2020.103977>
- [14] Lin, Y., 2022. Social media for collaborative planning: A typology of support functions and challenges. *Cities* 125, 103641. <https://doi.org/10.1016/j.cities.2022.103641>
- [15] Montgomery, J., 1998. Making a city: Urbanity, vitality and urban design. *Journal of Urban Design* 3, 93–116. <https://doi.org/10.1080/13574809808724418>
- [16] Oh, Y., 2022. Insta-Gaze: Aesthetic representation and contested transformation of Woljeong, South Korea. *Tourism Geographies* 24, 1040–1060. <https://doi.org/10.1080/14616688.2021.1974931>
- [17] Polson, E., 2022. From the Tag to the #Hashtag: Street Art, Instagram, and Gentrification. *Space And Culture*. <https://doi.org/10.1177/12063312221090608>
- [18] Punter, J., 1991. Participation in the design of urban space. *Landscape Design*.
- [19] Relph, E.C., 1976. *Place and placelessness*, Research in planning and design. Pion, London.
- [20] Roast, A., 2022. Towards weird verticality: The spectacle of vertical spaces in Chongqing. *Urban Studies* 004209802210944. <https://doi.org/10.1177/00420980221094465>
- [21] Schwartz, R., Halegoua, G.R., 2015. The spatial self: Location-based identity performance on social media. *New Media & Society* 17, 1643–1660. <https://doi.org/10.1177/1461444814531364>
- [22] Törnberg, P., Uitermark, J., 2022. Urban Mediatization and Planetary Gentrification: The Rise and Fall of a Favela across Media Platforms. *City & Community* 21, 340–361. <https://doi.org/10.1177/15356841211068521>
- [23] Wengel, Y., Ma, L., Ma, Y., Apollo, M., Maciuk, K., Ashton, A.S., 2022. The TikTok effect on destination development: Famous overnight, now what? *Journal of Outdoor Recreation and Tourism* 37, 100458. <https://doi.org/10.1016/j.jort.2021.100458>