More Than a Property: Place-based Meaning Making and Mobilization on Social Media to Resist Gentrification

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In this study, we examined the successes and challenges in online framing activities specific to place-based activism resisting urban redevelopment and gentrification. We conducted a qualitative analysis of online discourse on Twitter around the redevelopment of an old manufacturing district in Seoul, South Korea, and investigated how the place-based nature of the contested situation complicated the process of public mobilization. We found that the collective meaning-making based on individuals' existing relationships to a contested place led the citizens who were neither the tenants nor property owners in the area to find the struggle relevant to their lives and to establish their agency in an effort to influence redevelopment policy. We argue that the capacity of online discourse that alters the social meaning of place and its ownership opens up an opportunity for technology to better support grassroots efforts to improve social justice in urban development and policy-making processes. Yet, the disputes we found from the online discussions revealed some limitations of online discourse in place-based activism, which led us to suggest research agendas for the CSCW community to address the limitations.

CCS Concepts: • **Human-centered computing** → **Empirical studies in collaborative and social computing**.

Additional Key Words and Phrases: Activism; Discourse; Social Media; Urban Development; Urban Governance

1 INTRODUCTION

The research community in HCI and CSCW has recently developed an interest in how information and communication technologies (ICTs) can support grassroots efforts to pursue justice and equity in urban spaces beyond formal planning and policy-making [1, 7, 21, 43]. So far, studies have found that technology, especially social media, can be effective in raising the visibility of citizens' lived experiences in urban spaces that are often overlooked by governing authorities [1, 7]. Social platforms enable novel collective sense-making around the local problems and can empower communities to recognize and assert their own agency in institutional processes [8, 11].

Yet, only a few researchers have attended to ongoing grassroots resistance to market- or state-led urban development. These efforts of resistance often involve larger public mobilization, which includes not only principal local actors in a contested place such as residents and property owners, but also a general public with diverse perspectives and desires. Even though existing studies have looked at place-based activism, the scholarly conversation has only begun to attend to the fact that

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the problems and goals of collective action are locally grounded in geographic space. Literature in geography and urban social movements has shown that the social meaning of a place is integral to individual's identities, as well as to how they make decisions about place-based local policy and plans [5, 27, 39]. In this prior work, researchers used the concept of *frames* – schemata by which an individual or a group interprets the situations and environment surrounding themselves [13] – in order to analyze how the public can transform the socially constructed meaning of a place and empower themselves to influence local policy decision making [24, 33, 41]. The impact of socially constructed meaning and the ubiquity of social media pose a new set of questions regarding the efficacy of social media in activities designed to garner attention and affect public awareness and will in place-based activism.

Attending to this under-explored set of questions, we examine the successes of and challenges to online framing activities specific to grassroots activism. We look specifically at the context of resisting gentrification and redevelopment in Euljiro, an old manufacturing district in Seoul, South Korea. Gentrification, in our study, refers to the replacement of established low-income neighborhoods by higher-income re-settlers that results in class- and race-based forced displacement [6]. In the Global South and east Asian countries, gentrification has been induced by both state- and market-led redevelopment of urban centers as a means of profit-making [17, 36].

Anti-gentrification activists have combated the injustice of displacement by calling for the control of urban planning to be placed back in local communities, and to establish a broader understanding of ownership of place that goes beyond property ownership [20]. In a contemporary urban setting increasingly governed by a neoliberal, profit-oriented logic, such grassroots efforts have been a crucial vehicle of citizens' voices to combat governing authorities' decisions that failed to play out in the best interests of affected communities [14]. In the case of the anti-gentrification movement in Euljiro, citizens contested the redevelopment of the old manufacturing district and the forced eviction of existing business tenants, claiming that the cultural production of the local community should be protected and cultivated for the public good.

To understand how citizens collectively constructed the arguments and successfully mobilized the public, we conducted a qualitative analysis of discussions about the contested area that took place on Twitter. We focused on Twitter because it was integral to the public mobilization of the anti-gentrification movement in Euljiro, especially involving those who were not principal local actors (*i.e.,* individuals other than tenants and property owners). Drawing on literature in urban geography and social movements, we center our analysis on different elements of *frames* – identity, agency, and injustice, which are crucial to the emergence of oppositional consciousness – and how those elements interact with the place-based nature of discourse in the anti-gentrification movement.

In our analysis, as interpreting the meaning of Euljiro personally and collectively, citizens drew on their previous experiences and relationships to Euljiro, which led them to recognize the importance of the contested place to their own identity and survival. Two distinct but not mutually exclusive place identities were found in our study – the identity as citizens of Seoul was a weak but broad identification that was easily relatable for a broader audience. The identity as a member of the art & design community was narrowly applied to the specific group in Euljiro, but garnered a strong sense of community and political will.

Motivated by these identity frames, the citizens went on to find and conduct their agency in the local struggle. The citizens of Seoul could legitimize their opposition to the local government as a formal local polity of the situation. The art & design community's strong place identity led them to position themselves as direct victims of the redevelopment as well as agents of local change. The easily accessible action channels provided within the online environment of Twitter played a crucial role in transforming the gathered attention and political will into material political actions.

Together, the mobilized online public successfully pressured the local government to revise the redevelopment plan in a way conforming to the citizens' priorities.

Still, the dispute and confusion among the Twitter users who were part of our corpus revealed some limitations of the place-based online framing. Most importantly, by largely lacking the local actors' perspectives, the online discussion was limited in addressing the injustice of tenants being excluded from the formal policy process and other desires the local actors could have in improving Euljiro. In addition, the blunt and scattered conversation on Twitter did not easily support citizens to construct a shared long-term vision of the contested place and to find ways to sustain the movement's influence on the formal policy process. Reflecting back on literature in place-based framing of collective actions, we discuss tactics to complement the limitations of technology in online place-based activism.

In sum, we contribute to the growing social and spatial justice agenda in CSCW and HCI by providing an empirical case study of online activism as one way to combat gentrification and social injustice in cities. Our findings demonstrate that online discourse can construct the social meaning of place and place identities that contest the narrow ownership of place viewed through individual property titles. In turn, a wider understanding of who 'owns' a place can elicit political action to make local policy change. Lastly, linking our findings to the critical geography and social movement literature in CSCW, we suggest that facilitating relationship-based representation and understanding of place could be a way in which social and civic technology can better drive change toward a more inclusive, equitable paradigm of urban development.

2   RELATED WORK

Our study explores the opportunities in and challenges to social media campaigns in an anti-gentrification movement. To do so, we draw on literature in place-based activism and urban planning to understand existing struggles and tactics used to combat profit-oriented urban development.

2.1   Technology and Place-based Activism

Although little work has been done regarding gentrification and redevelopment struggles in CSCW and HCI (see [6] as one example), the research community has developed rich insight into the role of technology in social movements and civic activism. Amidst these efforts, increasing interest has been paid to grassroots activism pursuing democracy and justice in local politics.

Broadly attending to place-based activism, studies have found that technology-mediated communication within a local community can empower communities who used to feel little or no agency in the local political environment [1, 7, 11]. Collective storytelling and community asset mapping using interactive technology have proved effective in fostering the sense of community and helping communities to exert their own will [8, 11]. Crowd-sourced narratives have helped make visible to governing authorities the diversity of local communities' life experiences and desires [7, 21].

Social media has also been effective in generating larger public support, which is another crucial way local activists and non-institutional actors establish legitimacy. Social media's quick information dissemination and expansive connectivity benefited activists who needed public support [1, 3, 40]. For example, in housing justice activism in Atlanta, activists used visual artifacts, such as image macros, to gather support from the general public who were not directly subject to the housing crisis. They also tried to provide the general public with an easy way to send support, although the specific efficacy of these tactics was not closely examined [1].

In another study with close parallels to the work we are reporting on here, Crivellaro *et al.* examined how conversations on social media developed into a social movement to protect a public space against commercial development. By closely analyzing the online discourse on a Facebook Page, the researchers found that sharing cultural memories about the public space led citizens to

articulate a vision of the place they desired and ultimately construct a "collective with political will" [7].

These studies show that online discourse can both empower the core communities of place-based activism and mobilize a larger public. However, with the exception of Crivellaro's work, most of the studies have looked at everyday practices of local activists and not specifically at the contentious tactics and actions that are taken to confront governing authorities through large-scale mobilization. Additionally, although the scholarly conversation is commonly interested in place-based activism, it has largely sidelined how the practices and goals of civic action grounded in geographic space bring distinct effects on the way citizens utilize technology in their activities.

2.2 Challenges in Fighting Gentrification

The definition and consequences of gentrification are subject to active discussion in many disciplines. A larger discussion of the shifting definitions is beyond the scope of this study, and instead, we follow Corbett and Loukissas' synthetic definition of gentrification with some additional contextual concerns [6]. Reflecting on the rich literature on gentrification, they defined it as "a collective process of settlement by higher-income people in a low-income area, resulting in the forced class and race-based displacement of existing residents" [6]. Here we add consideration of commercial gentrification where businesses catering to established low-income communities are replaced by those catering to higher-income populations under state- or market-led commercial development [22, 29]. While the official purpose of the interventions is to improve the citizens' living environments, those large-scale developments often displace the existing communities into poorer living environments, dispossessing their social networks and livelihoods [17, 36].

In order to contest injustice, anti-gentrification movements have aimed to place control of urban development back to local communities [20]. While the immediate outcome desired by anti-gentrification movements is to nullify the legal and institutional decision of forced eviction, activists ultimately aim to expand the notion of ownership of place beyond specific property ownership. This wider definition of place-based ownership calls for local governance to appreciate the diversity and cultural production of local communities, such as locally cultivated social networks, economies, and culture [20, 22].

Thus, anti-gentrification movements often involve culture-oriented mobilization. The community mobilized within anti-gentrification movements includes not only the primary local actors such as residents and tenants, but also other agents of cultural production physically present in the area. Examples of such extended communities include cultural spaces in which a community of artists had based their practice and identity [22], a historic skateboarding arena symbolic of a skateboarding community throughout the country [42], and a community of people who cultivated and benefited from a communal form of economy in a low-income neighborhood [17]

Yet, this heterogeneous group of participants invite tensions between multiple perspectives on how to address gentrification. For instance, in a case study on grassroots resistance to urban renewal in Turkey, a culture-centered mobilization turned out to be inadequate to protect residents from immediate eviction pressure [17]. With the conflicting goals and demands, the campaign ended up prioritizing the negotiation of compensation and relocation terms instead of asserting a right to protect the local culture in place.

Further complicating anti-gentrification activism, the antecedents of these movements, including housing justice activism, squatters' movements, and anti-urban renewal activism, have suffered from a lack of "legitimate" power and legal standing. The institutional rules and processes in housing policy and development have tended to allow people other than property owners limited rights and agency [14, 20, 36]. Thus, in many cases, anti-gentrification activists seek larger public support as one of the means to earn legitimacy and political power enough to elicit governing

authorities' action [20]. To do so, these organizations turn to social and traditional media tactics for the purpose of raising awareness and public support [17, 22, 42].

However, turning to social media is not a silver bullet as it risks a dilution of the message and the group's ability to garner and maintain support for a specific local agenda. Examples in similar spatial conflicts manifested this struggle: Martinez argued that when housing justice movements in Spain merged with other non-local social movements, such as one advocating for refugee's rights, the urban movement was hindered from bringing sustained political change locally because of the mixing of messages and priorities [25]. Likewise, VanHoose and Savini found that using social media without strategies for keeping the initiative locally grounded failed to elicit policy changes from their local governments [42]. It is simply not enough to grab attention, organizations need tools for moving from a mode of issue publicity toward building organizational infrastructure that is place-based and effective [40].

2.3 Place-based Collective Action Frame

Crucial to earning and managing public attention successfully in gentrification and redevelopment struggles is the construction of a shared *frame* to enable collective action. The concept of a frame was originally suggested by Goffman as "schemata of interpretation" in which an individual makes sense of oneself and the world surrounding one [13]. The *collective action frame* in social movement theory is the application of Goffman's frame in social mobilization contexts: it refers to the action-based set of beliefs that enable people to mobilize through collective action [2, 38]. Literature has shown that the articulation and construction of frames are primary ways for social movements to find legitimate and just goals and actions shared among the participants [2].

Although the process tends to be considered top-down, dominated by social movement organizations in social movement literature, concurrent scholarship on grassroots activism has found that the process of frame construction is also a contextual process that happens as people make sense of the situation they face and link and align their perspectives and goals [7, 33, 37]. These collective elements of frame construction also make social media as a powerful channel for public mobilization – by allowing individuals to easily recontextualize political content and share it through social networks, social media becomes a powerful frame-setting and support-gathering tool[3, 37].

Frames consist of several elements that serve different roles in creating a resistant community and shaping collective actions. For instance, in activism resisting a place-based policy change or a development project, individuals need to articulate what the changes mean to themselves, who is responsible for any threats coming from the change, and what the individuals personally or collectively can do to combat the threats [4, 24, 33]. These respective elements help individuals to envision the outcomes they desire, identify themselves as a group, and secure the group's legitimacy to influence governing authorities' decisions.

In urban geography and sociology, the concept of place encompasses the social meaning of physical environments, constructed through social interactions and experiences within a space [32, 39]. Individuals construct their own sense of place as a combination of emotions, memories, and experiences they have in physical environments and this sense of place guides their decisions regarding what they want from and how they use surrounding built environments. As a result, while some principal functions of frames discussed above are universal throughout different types of activism, discourse in place-based struggles uniquely center on the social meaning of, and individual relationships to the contested place [24, 33]. How this sense of place is related to different elements of collective action frames offers valuable insights into how online campaigns can support and sustain a place-based grassroots activism. Here, we draw on urban planning researcher Robinson's theoretical analysis of the three elements in the mobilization of oppositions to contested local developments – identity, injustice, and agency frames [33].

People develop close attachments to places like home, neighborhood, or places of events that have been crucial to the development of one's personal or collective identity. When this attachment becomes integral to one's identity, a person develops a place identity: a kind of self-identification with a particular sense of place [24, 31]. In spatial struggles, the place identity becomes a source of collective political will because interventions conflicting with place identities are perceived as harmful at a personal level [4, 33, 44]. The mobilization of cultural communities observed in gentrification struggles echoes this defensive identity politics grounded in personal harms inflicted through a particular place. It is important to note that place identity is often unconscious as places remain a backdrop for our lives but can be foregrounded when people engage in reflective meaning-making and appreciation of place.

According to Robinson, the other two components of collective action frames – agency and injustice – are closely related to the identity component [33]. Injustice frame refers to how a collective interprets the situation they are facing as an injustice. Historically, this was focused on the unequal distribution of resources between social groups, but in contemporary urban social movements, it has come to encompass inequities in how diverse cultures and desires are experienced [9]. Common examples of this expansion of concerns for injustice frames include pointing out the exclusion of affected communities from state-led urban development decisions [15, 34]. The construction of an oppositional 'we' in contrast to 'others' executing the injustice is crucial to mobilization through an injustice frame, and place identity can provide a resource for the emergence of an oppositional community [12].

The development of collective identity is also important for people to find their agency in decisions regarding transformations of their living environments. To mobilize collective action in grassroots activism, a collective not only needs to figure out the threat they face but also justify that 'they' should and could act to combat the threat [12]. Again, framing provides a way for a community to develop a sense of agency as well as ground it in the contested space so that it could influence local policy interventions. Identifying the collective as a formal local polity can justify a collective's participation in the local politics [24]. Defining themselves as a direct victim of injustice conducted by 'others' (most likely to be private developers and local governments in the case of anti-gentrification) can also be a strong agency-defining frame [17, 33]. Robinson also observed that other factors like local political infrastructure and the personal and institutional relationship to local politics play crucial roles in agency development. Building on these prior analyses of place-based activism, we set our scope of analysis to the place-based framing and mobilization facilitated by social media in the context of anti-gentrification activism.

3 BACKGROUND AND METHOD

To understand the place-based meaning-making and mobilization process in anti-gentrification struggles, we analyzed the online discussions surrounding a redevelopment project in a manufacturing/commercial district in Seoul, South Korea. Here we give a brief overview of the context of urban redevelopment in South Korea and of the anti-redevelopment struggle in Euljiro and how we analyzed the distributed political action confronting redevelopment plans there.

3.1 Urban Redevelopment in South Korea

The history of the anti-redevelopment movement in South Korea began in the 1980s, in the era of the country's rapid economic development and industrialization. The developmental state government encouraged local governments to renovate dilapidated neighborhoods into new infrastructure and commercial housing to serve the country's new middle-class population and foster the modernization of its cities [36]. Thus, redevelopment always involved the displacement of the relatively poor existing residents. These conditions led to the creation of anti-redevelopment movements as

Fig. 1. A street in the Euljiro manufacturing district with the Anti-redevelopment banner (left). A part of the manufacturing district demolished and covered with tarp (right).

people who lost their homes demonstrated against political leadership for their survival [35]. These demonstrations often involved direct conflict with the police and other forms of political violence.

Though the practice of state-sanctioned violence in redevelopment projects has decreased over time, many urban developments in South Korea still work as a vehicle of profit-making for local governments in coalition with large corporate capital, fostering the privatization of urban space and commercial gentrification [36]. Subsequently, civic awareness of the injustice of the contemporary redevelopment practices and consequential loss of cultural and social places has risen, creating new forms of urban movements, including anti-gentrification movements that became active in the 2010s [22]. In anti-gentrification movements, citizens required the state to acknowledge and protect the tenant's rights from the widespread displacement led by commercial development [22]. Unlike earlier struggles in redevelopment, anti-gentrification movements mobilized various non-tenant actors by turning to people who patronized affected places and by appealing to its relationship as part of their identity [22]. This shift embodies the extended conception of injustice in today's urban movements influenced by urban sociologist Lefebvre's concept of 'the right to the city,' which argues that cities should not only be possessed by few owners but appreciated by every citizen [14].

3.2 The Anti-Gentrification Movement in the Euljiro Manufacturing District

The manufacturing district in Euljiro street, Seoul, is a place epitomizing the clashing desires in the country's history of economic development. In the 1960s small manufacturing workshops specializing in order-based precision machining and casting began establishing themselves near the stream called Cheongyecheon. Then in the 1970s, the area supported the growing manufacturing export economy of the country, until the 1990s when the country's economy shifted to a post-industrial mode. Then the manufacturing district began to cater to new industries growing in the country, including art, design, research and development, and start-ups in manufacturing [16]. In the meantime, the city government designated the area as an urban renewal (redevelopment) promotion district in 2006 as they prioritized improving the physical environment and infrastructure in the area. Being left as the last piece of land undeveloped in central Seoul, the area attracted young businesses with cheap rent and the unique appearance of the old streetscape. Since the 2010s, the area also became a popular culinary and cultural consumption destination among younger generations in Korea. Then in 2018, as the Seoul city government finally approved the redevelopment plan, a construction company started demolishing merchants' workshops in the area.

The merchants who were mainly tenants and required to move out of the properties, resisted the development, arguing that relocation would threaten their livelihood which relied on the agglomerated, networked ecosystem in the district. The merchants organized a coalition and protested the redevelopment actions, but the destruction and eviction process did not cease.

Alongside the merchants, a group of artists, researchers, and activists called the Cheongyecheon Euljiro Anti-Gentrification Alliance (hereafter the AGA) began using social media to publicize the redevelopment struggle. Organized online in January 2019, the group was a loose network of people who had an interest in protecting cultural and physical elements in the manufacturing district. In close cooperation with the merchant coalition, they undertook both offline and online advocacy activities, aiming to make the government stop the current redevelopment and to make a new regeneration plan that did not replace the rich cultural, historic, and economic fabric residing in the district with commercial properties. In their framing activities, they used the term 'industrial ecosystem' to encompass the values they want to protect against the redevelopment.

Social media activities were integral to the AGA's practice of activism, as they prioritized the publicity of the struggle the area faced and constructed a counter-narrative to gather public support to contest the government-approved redevelopment. While they used multiple social media platforms, the AGA specialized in the use of Twitter for gaining attention and mobilizing the public. Various materials including interviews, photos, and articles from mainstream journals were used on Twitter to inform the public about what the manufacturing district was and why it should be protected. They also reported their activities in the field and the real-time progress of demolition. Lastly, the AGA used Twitter to organize collective actions and encourage participation, including a petition signing campaign and a poster rally. The petition signing campaign gathered more than 20,000 signatures and had significant influence in eliciting the city government's decision to pause the entire redevelopment.

3.3 Methods

To analyze the online discourse around Euljiro and the civic confrontation around its redevelopment, we used a Python script to collect all tweets containing the word 'Euljiro' ('을지로' in the original Korean text) posted between April 2018 and July 2019. We set this time window to analyze how representation of Euljiro changed within the online discourse space in response to the social media campaign run by AGA. Our total corpus included 13,928 tweets from 7,760 users. Since the tweets were all written in Korean, our analysis was also conducted in Korean. All the data to be presented in this paper was translated from Korean to English by the first author who is a native Korean speaker.

To narrow our data set and establish our working corpus, we conducted a preliminary keyword analysis of all tweets returned by our script by month and read through some of the tweets in the initial corpus. As a result, we found that not all the tweets we collected addressed the redevelopment happening in Euljiro: many tweets simply mentioned Euljiro as a destination or promoted businesses or events in the area. Therefore, we generated a subset of the tweets relevant to the redevelopment by filtering tweets that contained keywords including 'redevelopment,' 'development,' 'merchants,' and 'preservation.' [1] This subset, which we call the 'redevelopment' subset, included 1001 tweets from 608 users; 103 (10.3%) tweets in the subset were posted by the AGA.

We then performed an inductive, qualitative analysis of the tweets in the redevelopment subset. Three dimensions emerged from our analysis: values associated with the place (*e.g.*, tradition, history, culture, memory, merchants, masters, crafting skills, art & design industry, ecosystem), affective stance toward the redevelopment (*e.g.*, positive, negative, mixed, not specified), and content

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[1]The original title of the AGA in Korean included the word '보존,' which translates into 'preservation.'
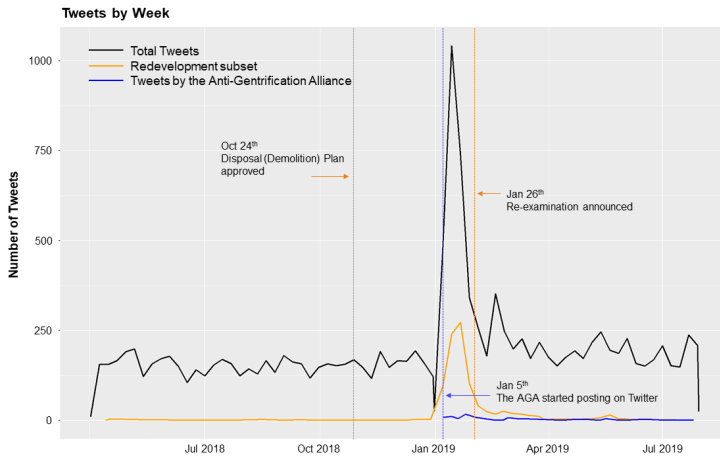
Fig. 2. Number of Tweets by Week

of the tweets (*e.g.*, information, personal experiences, comments on local governments and politics, link to a web page).

From the result of the analysis, we were able to identify the two elements of the frame – the identity and agency elements [33] – as central to the public mobilization within the online discourse space. We organize the results section based on the two elements of frames (identity and agency) and report the discursive interactions found with the weak and strong place identities across the elements. Along with the frame elements that led the mobilization to have significant political influence, disputes within the online discussions also revealed the limitations of online discourse and framing in the anti-redevelopment movement. Throughout the results section, following best practices, we use pseudonyms and paraphrased quotes to protect individual identities [10].

4 RESULTS

4.1 Public Discourse: Overview

The change in volume of tweets during the data collection period shows that the online attention to the redevelopment project grew rapidly as the AGA started their social media campaign. Prior to the AGA's first posting on Twitter on January 1st, there were very few tweets talking about the manufacturing district and the redevelopment plan. In the time that immediately followed, messages about the redevelopment plan rapidly increased. The heightened attention lasted about a month before the city government announced a comprehensive revision of the redevelopment plan. Once the government committed to revising the initial plan, the increased attention on Twitter to the redevelopment in Euljiro dispersed just as quickly.

The social media content analysis showed that during the period of active attention, the public on Twitter was not just curious bystanders attracted to the clamor, but active participants in shaping online discourse around the redevelopment. In terms of the stance toward the redevelopment, we found that 46.3% of the tweets expressed negative sentiment toward the redevelopment of the manufacturing district, whereas 1.4% were positive about the redevelopment and the rest, 49.5%, did not reveal a personal stance. In terms of the content of tweets, 50.7% were delivering personal opinions, 22.7% shared links to online journal articles, 11% shared information regarding the redevelopment or the manufacturing district. 4.3% encouraged collective action, mostly amplifying actions

organized by the AGA. Citizens also expressed their support to stop redevelopment by retweeting other tweets: eight of the ten most highly retweeted tweets delivered an anti-redevelopment stance or support toward the AGA's activities. The most highly retweeted tweet was one that shared the link to a google document to sign the online petition organized by the AGA (4518 retweets).

4.2 Identity: Motivating the Public through Place Identities

Once the AGA publicized the redevelopment in Euljiro on Twitter, citizens began their sense-making of Euljiro and its redevelopment by sharing various personal experiences, including personal memories in Euljiro, past encounters with other redevelopment projects, and collective experiences as professionals relying on the manufacturing industry in Euljiro. In doing so, these individuals harnessed their existing identities and developed them into a basis of mobilization of opposition to the redevelopment. There were two distinct place identities that emerged through our analysis, 'concerned citizens of Seoul' and 'art & design industrial partners.' These place identities respectively demonstrated weak and strong senses of attachment to the place and differing levels of internalization of the threats posed on the place by the planned redevelopment.

4.2.1 Broad Cultural Appreciation – Weak Place Identity. The most common place identity we found in the online discourse was that of *concerned citizens* of Seoul. Citizens harnessed this existing place identity as they described the redevelopment plan as a threat to the invaluable cultural assets of the city of Seoul. They often considered the crafting skills or the organically arranged streetscape in Euljiro as part of the identity of Seoul and a valuable resource for current and future economic opportunities. In contrast to the 'valuable' aging buildings and workshops, citizens noted the new mixed-use buildings that were planned as part of the redevelopment as 'valueless' for their lack of unique identifying aesthetics and for catering primarily to higher-income portions of the population. For instance, one user bemoaned the fact that the city tried to have "mixed-use buildings at the cost of bulldozing the area with its well-preserved unique atmosphere" (@user1).

This way of meaning-making did not require the citizens to reveal their personal identities or experiences related to the physical elements of Euljiro. Instead, leveraging their attachment to the city as a member of the resident community or cultural memories regarding the city's history was enough to relate themselves to what was happening to Euljiro. For instance, the redevelopment of Euljiro reminded many citizens of other government-sanctioned redevelopments and evictions they had witnessed previously, and led them to express the shared trauma from the events, including the sense of losing a home, a lost originality of the city, and a culture of appreciating the past: "The redevelopment in Euljiro reminds me of the disaster in Yongsan[2]. People's lives and memories are being ignored and destroyed again by the authority"(@user2). Based on this shared identification as a traumatized community, citizens of Seoul on Twitter were able to construct a frame that articulated what was 'valuable' and 'valueless' about Euljiro to the community's identity and survival.

> @user3: People visiting Seoul are not coming just to see high-rise buildings. The city demolished Pimatgol, now demolishes Euljiro, and constructs high-rise buildings again.
> It deserves the criticism that there is nothing to appreciate in Seoul.

Similarly, citizens were able to mobilize a common cultural image of Euljiro as an long-standing, organically constructed place; one of few remaining in the fast-developing city: "there is no other place than Euljiro in Seoul that is located in the emotional center of Seoul and still contains the thick layer of time" (@user4).

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[2]In 2009, police and privately hired security guards attacked the residents who were doing a sit-in protest against the redevelopment and forced eviction in the Yongsan area, Seoul. In the process, the temporary structure occupied by the residents caught on fire, resulting in more than twenty casualties.

Thus, we argue that the place identity as *concerned citizens* describes a weak but crucial shared frame of understanding the impact of the redevelopment plan in Euljiro. We see this identity frame as weak in the sense that individuals who shared this place identity were not under direct threat from the redevelopment either via displacement of residence or dispossession of livelihood. However, the ideals of historic preservation and cultural identity shared by the concerned citizens allowed a broader audience who did not have a personal relationship with Euljiro to connect to the concerns facing the district. Further, through this shared identity of concerned citizens, individuals in the online discourse space rendered the past redevelopment projects in Seoul and the redevelopment of Euljiro as threats not only to the victims of eviction but also to the identity of the city.

4.2.2   Industrial Partners & Cultural Producers – Strong Place Identity. Unlike the broad conception of identity in the *concerned citizens* frame, the second place identity we found was based on a specific relationship between the art & design community in Seoul and the manufacturing activities in Euljiro. Citizens who identified as artists, design professionals, and students in the fields shared their experiences of interacting with the tenant-merchants in Euljiro and described how essential the products and services the manufacturing community provided were to their professional practice or education:

> @user5: I did not graduate from an art college or don't have any background in design, but it was thanks to the merchants in Euljiro that I was able to maintain my work until now. Euljiro is a very important place not only for art/design students but also for people like me who want to start off without any background. Whenever I brought some sketches of what I wanted to make, the merchants helped me to figure out how to do it. That was such a big support.

The recognition of how important the manufacturing activity in Euljiro was to members of the art & design community resulted in a strong place identity within the community, leading the community to perceive the threat Euljiro's manufacturing industry faced as one to their own survival. The art & design professionals frequently projected the harms of the redevelopment plan to their individual livelihood and to their collective professional practices. One user said, "I have no idea about where to go to get the materials and services if Euljiro is going to be destroyed" (@user6). Another said that "the whole design industry will decline if the workshops in Euljiro disappear" (@user7). The government's destructive redevelopment plan for the area was perceived by this community as revealing the government's disrespect and ignorance of the art, design, and manufacturing industry:

> @user8: I can't believe how ignorant this society is about art & design industry. Why doesn't the government know it should stay away from art if it really wants to cultivate it?

We argue that due to this strong place identity, despite the highly specific place relationship that the frame was built upon, the art & design identity's frame advocating for the value of Euljiro as part of the art-design-manufacturing industrial ecosystem could be the second most common frame of contention next to the concerned citizens' frame. In 70.1% of the posts aligned with this frame, citizens identified themselves as artists, designers, or makers, which demonstrated that harnessing the professional identity and relating it to the Euljiro was integral to the mobilization of this community. In addition, the art & design community's experience-sharing tweets were among the most highly retweeted ones in our analysis, showing that a strong place identity based on concrete, subjective common experiences was effective in gathering massive attention and support to opposition to a local urban development project.

In sum, the two collective place identities that emerged from the online discussions differed in how closely they were tied to a collective's existing identity and survival. The stronger the tie was, the stronger the motivation for mobilization was. Citizens of Seoul found the redevelopment in Euljiro not directly impacting their individual identities, but still considered it as a loss of cultural, historic assets crucial to the city's identities. For the art & design community, their symbiotic relationship to the manufacturing industry in Euljiro led them to recognize the redevelopment an immediate threat to their professional identity and livelihood. Still, both showed that recognizing how one's existing identity was related to a particular meaning of place was crucial to the mobilization of opposition to a local spatial intervention, especially of those who were not considered to be under direct impact of the redevelopment in a traditional understanding of the struggle.

4.3 Agency: Turning Oppositional Consciousness into Collective Action

Although the collective meaning-making led the citizens to oppose the redevelopment plan, feeling agency in the struggles was not easy for those who were not the principal local actors bound to the struggle as property owners or tenants. Thus, the sense of frustration and powerlessness was often found in the early discourse after the AGA's first post. A citizen said, "I feel powerless that there is nothing I can do to stop the brutal destruction of Euljiro" (@user9). Nevertheless, we found that as individuals participated in constructing the frames on Twitter, others were able to develop a sense of agency and ultimately transform the framing activity into real-world political influence via accessible action channels within the online environments.

For users mobilized as concerned citizens, political critiques on Twitter provided a space to articulate their frame of contention further and bring the accusation to the city government who (supposedly) sanctioned the redevelopment that would impair the public values of Euljiro. The culture of political (or polemical) discussion on Twitter amplified such discourse, attributing the redevelopment plan to political figures including the city mayor. Often, a political commentator who had a substantial number of followers on Twitter shared a news article addressing the redevelopment in Euljiro along with their own comments judging the city's decision. Their followers would then reply to the tweet with short messages of agreement. These political comments had the most replies in our analysis (eight to ten comments).

Then the mention feature of Twitter allowed the citizens to deliver the criticism directly to the city government by mentioning the Twitter accounts of the city government (@seoulmania) and the mayor (@wonsoonpark) in tweets criticizing their acts. Although the political conversation described above tended to develop into a polemical one, still these critiques, once they 'mentioned' the governing authorities, conveyed the public discourse contesting the redevelopment to the governing authorities. While some tweets simply showed disapproval of the city's decision, others demanded that the redevelopment plan be amended to reflect a specific vision based on the collectively developed meaning of Euljiro and its importance to the city's identity:

> @user10: Euljiro is not one of those blighted and in need of redevelopment, but an authentic place where small manufacturing businesses played an irreplaceable role together. The city @wonsoonpark must think how to protect and facilitate the authenticity, not replace it with multi-use complexes.

Meanwhile, with their stronger place identity, the art & design community expressed a stronger need to take action as a collective to protect their place identity. They often questioned what they, not someone else, as a community could do to stop the redevelopment. In one attempt, the art & design professionals tried to extend their frame to a larger public by situating the potential damage that the professions would suffer from the planned redevelopment as damage to the country's overall industrial progress. These tweets sometimes included news reports or videos from other

media that covered the manufacturing industry in Euljiro with the goal of further raising public awareness of the art & design place identity. This community also encouraged the public to take political action by including the link to the AGA's online petition sign-up page in their tweets:

> @user11: Euljiro is a place where artists can purchase materials and explore their works while discussing with the engineers. Not an art major, I was able to grow up (as an artist) based in Euljiro. Please do not take the opportunity from artists under the name of redevelopment especially at this moment when the art industry is still not well established or recognized in this country. (link to the online petition)

We found that these frame extension efforts of the art & design community were effective as other citizens on Twitter who were not associated with the art & design industry said that they learned the importance of the manufacturing industry in Euljiro from the stories shared by the art & design professionals:

> @user12: (I did not know that) Euljiro was a gathering of businesses of specialized skills in tools, lighting, and Acryl. It would be a massive loss if the long-established network and shops run by highly specialized individual merchants just disappear.

It is important to note that in addition to the citizens' collective development of agency through discourse, the AGA's efforts to provide various means of political action were crucial to enhance the sense of agency and convert the mobilized attention into political pressure on the authorities. For instance, to make the criticisms delivered via Twitter mentions more consistent and concrete, the AGA posted a short write-up summarizing their place framing and calls upon the city government so that users could easily copy and paste it into their own tweets. In addition, they posted a link to an online petition that they would submit to multiple governing authorities responsible for carrying out the redevelopment plan. In the petition, they set forth their place frame of Euljiro, which encompassed both of the frames illustrating Euljiro as a cultural asset, and as part of the industrial ecosystem.

In addition, the AGA provided other means of online participation catering to the stronger motivation and desire to act within the art & design group. They organized an online poster rally, where they invited users to create and share posters with political messages calling to stop the redevelopment and preserve the manufacturing district via online channels. The poster rally was one of the collective activities the AGA organized that had the most number of participants along with the online petition. This form of participation allowed the art & design professions to utilize their professional skills as well as enabled participation from various regions in the country who shared a similar identity. Indeed, participants who sent posters were not only based in Seoul, but also from different regions in the country.

In sum, the online framing activities and action channels accessible online effectively equipped the public with various means to find and execute agency in the struggle and thereby transformed the oppositional consciousness into real-world impacts on local politics. The citizens' collective actions successfully pressured the city government to pause the ongoing demolition and eviction and decide to revise the entire redevelopment plan. Also, the official announcement of the mayor showed that the authority had made the decision in reaction to the place frames. The mayor said, "We should not repeat the tragedy of the Yongsan redevelopment" and "a place accommodating history and memory of citizens should be preserved," thereby acknowledging the redevelopment of Euljiro as a continuation of the government-led ill practice of redevelopment as argued by the concerned citizens. Then in the revised plan, the city set forth to cultivate the manufacturing industry in Euljiro as part of its economic development plan, resonating the visions in the art & design group's place frame.

4.4 Tensions in Online Place-based Framing

Despite the apparent effectiveness of the AGA's campaign and frame-making on Twitter, our analysis also found that the collective action frames constructed with non-tenant communities' perspectives and experiences faced several disputes. These disputes – an expected element of online discourse – could undermine the mobilized public's legitimacy and capacity to make changes that benefit the local communities. While some of the disputes demonstrated downsides of the action frames centered on the non-tenant place identities, the blunt conversation on Twitter made it difficult for the public to navigate the nuanced relationships between the heterogeneous perspectives.

First, citizens who were more knowledgeable of the physical environment and local reality in Euljiro pointed out that the place identity- and value-based frames on Twitter were missing considerations of a need to improve the built environment in Euljiro. They argued that the physical condition of Euljiro was crucial to the safety and health of local communities in proximity to the area and the dominant anti-redevelopment frames on Twitter were missing the principal local actors' desire in improving Euljiro: "I understand people moaning about the loss of cultural assets, but as a person who patronizes the district everyday, improving the dilapidated physical environment is necessary for Euljiro. It is unhealthy to the merchants and subject to high risk of fire" (@user13). Some users even argued the public's call to protect Euljiro was naive and unrealistic, not knowing what constituted the purported values of Euljiro: "history and culture exist not only in Euljiro but everywhere. Some sort of development is necessary for Euljiro" (@user14).

These disputes were related to the constant tension between the *use value* frames and the *injustice* frame found in the online discussions [33]. Largely lacking the tenants' voices and their own visions of Euljiro, the anti-redevelopment frames on Twitter were mostly constructed by citizens who were not tenants nor property owners and centered on the cultural production or the use value of Euljiro described in non-tenants' perspectives. On this point, citizens argued that the framing of the anti-redevelopment movement should have centered on the tenants' rights and the injustice of the forced eviction, instead of how Euljiro provided values to users of the place. One argued "what matters here is the fact that the redevelopment process has not included the tenants, not how others find the place useful" (@user15). Another said, "I would agree if what people try to protect are the tenants' rights and their living, but otherwise... I don't know what part of Euljiro should be protected" (@user16).

In this regard, throughout the discourse, the legitimacy of the art & design place frame was challenged by citizens who were not part of the art & design community. The dissenters argued that the art & design people were not representative of Euljiro in either legal relation to the space or the size of the community. One said, "the manufacturing district is not a convenience store where every Seoul citizen patronizes. Why should we feel sorry about them?"(@user17) Others even criticized the art & design group for being 'hypocritical hipsters' who had gentrified the manufacturing districts for several years and suddenly turned to anti-gentrification activism. These disputes reveal that the art & design community was still considered by other citizens not as a co-creator of cultural production in Euljiro, but merely another consumer of Euljiro's cultural production.

Both the members of the AGA and citizens on Twitter tried to reconcile the conflicts between the different perspectives by adjusting the frames, but the attempts were not successful enough to put together the perspectives into one shared vision for Euljiro. First, when trying to refute or reconcile some conflicts on social media, citizens took very indirect ways which did not allow the attempts to grow into a sustained conversation. Often they did not reply to or retweet the opinions they tried to counter. Instead, they only implied that they were disputing other users' opinions they found on social media by saying 'I have seen people arguing A, but I think B.':

> @user18: Why do people blame hipsters for the redevelopment? It's the city government who plans and sanctions the redevelopment.

By introducing more nuanced explanations into the discourse the AGA tried to show that the alternate vision they were advocating in Euljiro was neither ignorant of physical conditions nor the procedural injustices that the tenants were facing. AGA members shared links to news articles where they articulated the issue to a deeper level and posted quotes from interviews with the tenants, artists, activists, and researchers, demonstrating how the different social groups were collaborating to sustain the manufacturing industry on the ground. Despite these efforts, such nuanced information hardly survived throughout the online discourse space. Advocating for the 'unique value' of the current Euljiro, citizens still resorted to the presumption that 'history' and 'culture' are invaluable assets, without specifying what elements of the place constituted the valuable historic and cultural heritage. While this vagueness made the frame easily relatable to the citizens who already had memories and experiences in Euljiro, for those who did not, it left questions about what exactly the frame claimed to achieve and further complicated the existing disputes.

5 DISCUSSION

Our research shows that the collective meaning-making of Euljiro on social media transformed the tenants' resistance to the forced eviction into one shared across larger communities linked to the contested place via different personal and collective experiences.

Turning to literature from critical geography, we can better understand the impact of the potential of technology for progressive place-making by fostering a relational perception of urban places and their ownership. The tensions and disputes we found in online discourse point to areas that CSCW researchers and designers need to consider when building systems to support civic collaboration and consensus building in place-based activism and local policy-making.

5.1 Strength: Understanding the Sociality of Place in Online Activism

Throughout the online discourse, citizens articulated what Euljiro and its redevelopment meant to themselves by harnessing cultural memories, personal experiences, and their existing identities related to Euljiro. This reflective process of place-based meaning-making provided the public a chance to recognize how important a particular version of a place has to their own identity: for the citizens of Seoul, Euljiro was an invaluable asset for the city and its community in which a tradition cultivated by a long-standing local community was still alive; for the art & design community, the manufacturing industry in Euljiro was an irreplaceable partner to their professional practice and identity.

Then, in terms of public mobilization, the recognition of place identity led individuals to find themselves as legitimate entities who had voices and agencies in the place's future. The place identity as citizens of Seoul legitimized their voices in participating in the policy decision of their city government. The artists and makers found themselves under the direct impact of the redevelopment due to the dependency of the professions' practice and identity on Euljiro. In other words, the collective place identities built in the online space unsettled the normative concept of 'legitimate' political subjectivity in an urban struggle that was usually bound to the geographic and legal conditions of a neighborhood or other administrative divisions.

At the same time, the situated conversation constructed a shared perception of place as a societal resource that could be collectively cultivated and appreciated. Literature in critical geography has demonstrated that recognizing places as sites of cultural production beyond their exchange-value as property is crucial for social and economic sustainability of urban space [15, 45]. Despite the

different place identities, the social meaning of Euljiro constructed by the distinct voices emphasized various aspects and values of Euljiro as a socially constructed place.

Online discourse via Twitter was apt for facilitating the process because individuals could share, link, and *connect* their experiences and memories related to the contested place [3]. As pointed out in the literature, recognizing one's place identity requires reflective appreciation and meaning-making of the place [4], and the online discourse space provided the chance for such reflection. The interlinked histories, which were otherwise largely invisible to each other, created a shared cultural touchstone based on the communal life in underdeveloped areas in the city, the ongoing symbiosis between the country's art & design industry, and the seemingly declining manufacturing industry in Euljiro.

In addition, the personal level frame alignment and political actions found in our analysis complicate the connective action on social media. The potency of connective action on social media is that by allowing personal-level frame alignment and mobilization, it empowers individuals as entities with agencies in a larger societal issue [3]. Yet, it has little to do with collectivizing the individually aligned frames back to one local issue to effect change for the local community. In this study, we showed that place-based framing activities can do both if it can collectivize elements integral to different place identities under the same vision of one geographically grounded place.

This is where social movement organizations played crucial roles both in the anti-gentrification movement in Euljiro and the grassroots resistance to the removal of a public pool studied by Crivellaro *et al.* In the study, the social movement organizations had control over the discourse space (a FaceBook page) and achieved collectivization by actively suppressing opinions that were not aligned with the dominant place frame [7]. In our case in which the online discourse was more open to the larger public, the AGA provided the mobilized public with action channels that were easily accessible and catered to the groups' different desires and agencies, so that funneled the gathered attention into a unified political influence.

5.2 Opportunity: Infrastructuring Influence through an Injustice Frame

Meanwhile, the disputes we found from the online discussions revealed the weaknesses of online activism on social media in terms of sustaining the mobilized political will and influence. We argue that the limitations, on one hand, belong to the defensive identity frames which are good for protecting the status quo but limited in diagnosing problems and suggesting improvements for the future. The online discussions centered on describing how important this particular version of Euljiro was at the moment, and thus why it should be preserved. However, overlooked in the conversation were other elements that could be crucial when articulating a full vision of a future outcome desired by both the public on Twitter and the principal local actors on the ground.

The nature of social media discourse further reinforced these limitations. The voices of principal local actors – the tenants, property owners, local patrons who were not part of the art & design community – were significantly under-represented on Twitter. In contrary, people who were already in active political conversation on Twitter, or the art & design community who used social media for professional identity and community building, were more effective at having their voices in this particular online space. In addition, the blunt and scattered instrument of Twitter made it harder for citizens to navigate the nuanced differences between different perspectives. As pointed out by earlier studies of urban social movements, the conflicts between heterogeneous perspectives, if not negotiated in nuanced ways, could significantly harm the capacity of the mobilization to have long-term influence on urban decision making processes [17, 26].

We suggest that one way to overcome this limitation in online activism is to build a strong *injustice* frame. To reiterate Robinson's definition, an injustice frame is for a group to make sense of the situation they are facing as an injustice [33]. In urban development contexts, it often aims to

point out the exclusion of affected communities from the institutional process and adjust the power imbalance between the state and citizens. Contemporary urban social movements increasingly adopt injustice frames because outcome-focused frames can only provide short-term visions for a place and fall short in establishing long-term agency of communities in the formal policy process [14, 28]. Indeed, the shortfall manifested in the online activism in Euljiro – once the government announced the revision of plan, the public struggled in figuring out what they should expect from or how they should intervene in the process following the revision. We argue that a strong injustice frame that calls for clear terms of citizen participation might have helped the public better to *infrastructure* the agency they expanded through activism.

Constructing an injustice frame and overcoming other limitations of online place-based framing would require more than online framing and connective actions. Previous studies in CSCW and HCI have shown that successful online activism requires various resources including social movement organization members' on- and off-line negotiation with stakeholders [19, 37]. In the context of urban social movements, those resources include social connections to authorities and expert knowledge in legal statute and administrative process [17, 42]. Additionally, there is a need to recognize and counter the fact that online discourse in place-based activism changes dynamics of whose voice is heard loudest – there is sampling bias in all forms of public participation – and so risks of involuntarily reinforcing an exclusive culture of participation remains, and may propagate the exclusion and exploitation of vulnerable local inhabitants.

Indeed, it is important to understand the relationship between online framing and other components of place-based activism – in our findings the agency elements of the collectively constructed frames and the AGA's efforts to provide easily accessible action channels together supported citizens on Twitter to expand and implement their agency in the struggle. Although we have focused on collective frame construction on social media in this research, traditional media was also a central arena of frame construction and transformation in the anti-gentrification struggle. We encourage future research to investigate the interaction between online framing activities in different media spaces and other elements of place-based activism to suggest better ways to overcome the limitations of online place-based framing we report here.

5.3 Technology for Progressive Places

Lastly, we situate the opportunities we found from the place-based online activism in a larger conversation around tactics to combat the spatial injustice in cities and realize imaginations for progressive places. In doing so, we argue that the construction of relationship-based places we observed in the online space has subversive potential to change the way we create places in contemporary cities. Critical geographers have argued that although a place is socially constructed with interactions between different groups and their activities in a space, it is hard for us to recognize the sociality of place as the complexity often gets reduced to ownership of properties and lands [27, 45]. In that sense, feminist geographer Doreen Massey argued that recognizing the diverse relationships that individuals have with a place possesses a subversive power to combat the neoliberal paradigm of urban development [27]. She argues that by revealing who actually cultivates and benefits from the values of a place and who would be harmed by a particular urban intervention we can redefine who are the legitimate voices to claim the ownership of places, and unsettle the exclusive logic of urban development in neoliberal cities.

Following the feminist relational conception of place, identity, and power, many place-based communities have brought about collective efforts to visualize invisible relationships and dependency embedded in a place. These include informal and invisible labors of street vendors that cultivate a cultural space [18], as well as ecological relationships between different localities [30]. These activities have brought the participating communities a raised sense of belonging [11, 30], different

lenses to interpret local problems [18], and better counter-narratives to state-led dispossession [23]. Increasingly, many of those efforts are adopting online technology. Recent examples such as the Anti-Eviction Mapping Project in San Francisco exemplify such relational mapping and storytelling projects that ultimately seek to influence urban policy regarding gentrification and evictions [23].

This mission applies not only to supporting grassroots efforts, but also to mitigating technology's own effects of reinforcing market logic in urban space. Researchers in CSCW have pointed out that technology representing places online often focuses on its aspects as property or as business catering to specific groups of people, while excluding others [6]. We argue that providing an online space that accommodates and represents the diverse and plural meanings of place and the relationships that constitute the multiplicity would be one way that the community of technology could better engage with both the production and consumption side of exploitative urban development, gentrification, and displacement.

6   CONCLUSION

In this research, we illustrated the mechanism of online discourse becoming a successful channel of public mobilization in an anti-gentrification movement via the lens of frame and their specific elements – identity, agency, and injustice. The capacity of online discourse on social media that alters social meanings of a place and its ownership successfully motivated and empowered the public to have material influences on local policies, while the weak attention to the procedural injustice and lack of sustained nuanced conversation showed some limitations to overcome. Building on these findings, we suggest that technology has the potential to facilitate a more democratic and just paradigm of urban development by accommodating the understanding of place based on diverse relationships and its collective values. In sum, the study provides new opportunities and research agenda for CSCW to engage better with grassroots effort to achieve spatial justice in contemporary cities.

7   ACKNOWLEDGEMENTS

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