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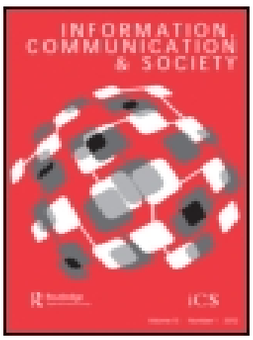

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# Racial projections: cyberspace, public space, and the digital divide

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# Racial projections: cyberspace, public space, and the digital divide

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**ABSTRACT**

Scholars of critical race studies, urban history, and information and communications technologies (ICTs) share an interest in the relationship between spatial and racial disparities, including the quality of basic infrastructure, degrees of connectivity, and participatory culture. However, contemporary research on the digital divide struggles to link historical legacies of uneven development, as well as social justice strategies, with digital participation in urban spaces. By examining contemporary digital art that critiques the spatial inequalities encountered by U.S. racial minorities, this article illustrates how public intellectuals use ICTs in ways that draw upon past strategies to territorialize space for political ends. It focuses on digital pop-ups, open-air installations that cast images onto public space using projectors. Historicizing these new efforts illustrates a continuity of tactics engaged by communities of color in response to socio-spatial inequalities in the urban United States, such as the 1970s mural movement's efforts to re-politicize spaces of exclusion. While existing literature finds that digital inequality results in differential digital human capital, this research indicates that place-based claims, such as digital pop-ups, are important sites for combatting racial injustice and creating more inclusionary spaces, especially among youth adults.

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On a fall day in 1970, bulldozers appeared in the Barrio Logan neighborhood of San Diego, California. Residents of this largely Chicana/o community joined together to form a human chain around the imposing machinery that threatened to replace a parcel reserved for a neighborhood park with a California Highway Station. Planning practices dismissive of Chicano/a residents, unfulfilled promises by government officials, and years of advocacy by neighbors came to a standstill upon this contentious plot of land located beneath the San Diego-Coronado Bridge. Without waiting for municipal or state approval, residents occupied the parcel, where they boxed out bulldozers with their bodies and transformed the dry dirt into parkland with plants and seeds. In the following years, Chicana/o artists from throughout California painted the bridge's monotone walls with the vivid iconography of the Chicano/a Movement and Mexican American history in a

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reconstruction of place-based identity that highlighted shared forms of spatial struggle across the *barrios* of California (Avila, 2014; Villa, 2000). The intervention of Barrio Logan residents is both an example of staunch inequalities and a model of the ways spatial interventions can undermine oppressive landscapes.

The story above is well known among urban studies and ethnic studies scholars as a critical point within the Chicano/a Rights movement for the ways it transformed unwanted infrastructure into a cultural asset. Within media studies, scholars concerned with the digital divide – or uneven access to information and communication technologies – have similarly underscored the active role of space in the perpetuation of disparities based on race, as well as displays of resistance to digital marginalization (Gilbert, 2010; Gonzales, 2016; Robinson et al., 2015). It stands to reason that historical legacies of racism manifested in the built environment, likewise, hinder internet access and prevent equal engagement with web-based content. Yet, the history of spatial struggle and resistive practices by marginalized communities typically stand apart from contemporary concerns over the digital divide in academic discourse. Uniting scholarship from information and communications technology studies, critical race and ethnic studies, and urban history, this essay attempts to bridge this gap by examining digital place-based claims that challenge historical spatial legacies encountered by communities of color (McPherson, 2012).[1]

My contribution to this conversation is two-fold. I contend that although the mediums have changed, historicizing these efforts suggests a continuity of tactics – or everyday practices that recast the orderings of the powerful in acts of contestation – engaged by communities of color in response to socio-spatial inequalities in the urban United States (de Certeau, 1984). Here, I gleam insight from media scholars who have contended that the 'digital turn' represents a continuation of communication technologies rather than a stark departure (Baron, 1999; Jenkins, 2006; Nakamura, 2015). Likewise, here, I assert that responses to the inequities that accompany new technologies represent the persistence rather than abandonment of earlier meaning-making actions. Related to this first point, I further argue that where digital inequality results in differential digital human capital – or the ability to participate in the internet and harness it towards attaining beneficial social, economic, and political outcomes – place-based claims emerge as an important site for combatting racial injustice. Although compelling scholarship has concerned itself with social media organizing, the concern with #hashtag activism can obscure the continuing significance of place for participatory culture if it does not also concern itself with the ways communities of color have resisted marginalization through cultural production in everyday spaces (Costanza-Chock, 2014).[2] Focusing on the built environment, in this analysis, public plazas and universities will unfold as particularly fruitful places for digital spatial interventions.

In order to flesh out these arguments, this essay examines digital pop-ups – digital installations using projectors to cast images onto hard surfaces in order to communicate a public message – as a method of spatial intervention growing out of earlier efforts used by communities of color to re-politicize spaces from which they have been excluded. Alongside a brief account of the contemporary racial digital divide, it examines two place-based pop-up installations that were held in spaces whose self-proclaimed mission is the diffusion of knowledge, *Art Intersections* by the Smithsonian Asian Pacific Museum Center in 2013 and *Latin@ Mobility in twentieth Century California* curated by students enrolled in a course I taught at Yale University in 2014. That is, this essay foregrounds digital pop-ups

as a method for questioning the racial digital divide through uniting technology, histories of marginalized communities, and public spatial interventions. In doing so, it points towards a digital adaptation of earlier methods used for combatting spatial inequality, such as those enacted by the muralists of Barrio Logan, who rewrote the meaning of oppressive infrastructures with forms of cultural expression. This is not to collapse the real differences between the producers of these media and the grassroots actors in Barrio Logan, the latter whose stakes and perspectives are heightened by intersecting forms of marginalization experienced in their home environment, but to underscore the significant parallels in their traditions and goals.

Although the technology of digital projection has undergone significant changes over the last century, its purpose as a tool for civic communication has remained relatively steady. In its earlier iterations, during the 1920s, projection media was composed of lamps, lenses, and mirrors. Creating spectacular displays across the night sky, 'environmental projections' danced upon clouds and skyscrapers in a manner reminiscent of science fiction. As described by art historian Abigail Susik, these early forms of display gave way to advertising and political radicalism by the 1970s. The juxtaposition of light and shadow has served to transform our cityscapes, as urban surfaces 'become either willing or unwilling screens of fields for imposition' (Susik, 2012). Today, digital pop-ups use computers and high-powered projectors to create live art installations on walls, buildings, and streets. For instance, the UK-based company Urban Projections provides a range of production services, including street projection, digital graffiti, and projection mappings that fit directly onto individual buildings (Figure 1). Their clients have ranged from large organizations to independent arts organizations, such as the BBC, Dr Marten, and the Royal Festival Hall in London (Urban Projections, 2015). Because installation does not necessarily require permission, projection bombing has also been adopted for activist projects. Temporarily transforming landscapes into spaces for public art and commentary,


**Figure 1.** Courtesy of Urban Projections.

digital projection by artists, activists, and non-profit organizations decenter for-profit marketing in favor of political commentary. Likewise, digital pop-ups have the potential to add to the contours of public discourse and can be leveraged to expand the cultural citizenship of those normally excluded from galleries, central business districts, universities, and other elite spaces.

Urban history and critical race studies provide a foundation for scholars interested in the ways marginalized groups engage recent media developments, including digital projection, in response to socio-spatial inequalities. Past and present forms of discrimination in planning policy, property acquisition, and the distribution of undesirable land uses are intimately tied to the racialization of space. Where social structures of 'white privilege' have not wholly excluded people of color from asset accumulation, policies and practices of racial apartheid devalue such investments and concentrate non-white populations in segregated neighborhoods with higher pollutants, dilapidated infrastructure, and fewer public resources (Diaz, 2005; Lipsitz, 2006; Pulido, 2000). Americanist George Lipsitz refers to the ways white Americans and African Americans experience differential relationships to wealth, and its subsequent manifestation in the form of racial exclusion, as 'the white spatial imaginary' (2011). Idealizing homogeneity and spatial control, the impulse of the white spatial imaginary is to obscure the unequal effects of geographic opportunity and the experiences of marginalized populations. Persistent patterns of racialized wealth and poverty – from Federal Housing Authority subsidies to the siting of undesirable land uses – have generated a spatialized politics of race with evolving consequences in the twenty-first century.

Digital pop-ups represent a form of digital projection that can be used to engage communities that have historically been excluded from full participation in a variety of place-specific contexts. A notable example exists within museum exhibitions that target audiences with minimal digital access, such as recent work designed by the Smithsonian Asian Pacific American Center and Smithsonian Latino Center. In 2013, the centers launched *Gourmet Intersections*, a digital exhibition examining 'fusion foods' as a means to explore the shared histories, commonalities, and culinary traditions of Asian and Latino/a descent communities in the United States. Although often viewed separately from one another, the exhibition curators foreground the relational experiences of Asian and Latino people, who have intersecting experiences of immigration, labor segmentation, and neighborhood formation. Presented collaboratively by the two centers, *Gourmet Intersection* represents a multi-nodal approach to the museum experience. Web visitors are presented the options of navigating the exhibit through a website, engaging the Twitter hashtag #AsianLatino, or sharing their own story to the museum Instagram, Twitter, or Facebook accounts (Smithsonian Asian Pacific American Center, 2013a). At the center of this work is creating multiple access points to the exhibit in order to generate a public conversation through art.[3]

A principal component of the *Gourmet Intersections* digital exhibit was an accompanying *Art Intersections* pop-up featuring digital-born artwork by Latino/a and Asian American artists in the spring of 2014. Drawn primarily from Tumblr and Twitter, participating artists included Steve Alfaro, Audrey Chan, the CultureStrike Network, and Lalo Alcaraz, among others. Curators Adriel Luis, Eric Nakamura, and Shizu Saldamando designed the *Art Intersections* pop-up as a two-day event in Silver Spring, Maryland with the purpose of breaking down museum walls and promoting an interactive experience that would draw

attendance from a wide-array of participants, particularly those with low rates of museum patronage. According to Adriel Luis, the event targeted immigrant communities without access to high bandwidth internet – who would have limited access to an online exhibit – by meeting people where they already live in a fusion of music, art, and gathering in the Veterans Plaza (Figure 2). Using high-powered projectors, artists' images were magnified and cast onto the walls and streets of the plaza, virtually turning the space into a living exhibit. An archive of this event continues to live at a Flickr site and digital lookbook devoted to the exhibit, as well as a YouTube video of children dancing to techno beats atop projected images in the public square (Ajax404, 2013; Smithsonian Asian Pacific American Center, 2013b, 2013c, 2013d).[4]

When considering the *Art Intersections* pop-up alongside the legacy of spatial interventions waged by people of color, it appears to share a consonant effect of politicizing public space through media and art. Located in Downtown Silver Spring, Maryland, minutes away from Washington D.C., the Veterans Plaza occupies the symbolic heart of the city. As a site marked for public events and festivals, a pop-up that speaks to the hybridity

**Figure 2.** Courtesy of the Smithsonian Asian Pacific American Center.

of the American experience takes on a special significance here. As described by geographer Eugene McCann, public space often ignores racialized geographies and denies racial differences, particularly in U.S. urban contexts. Where symbolic spaces such as central business districts are rendered devoid of social struggle in order to facilitate the assumption of public consensus, murals serve as a powerful form of communication that utilize everyday spaces in order to foster community expression and, in some cases, calls to collective action. In the tradition of grassroots actors, but yielding uniquely high access to technical capital and institutional resources, designers of digital pop-ups like *Art Intersections* can rupture the perceived homogeneity of the downtown. Through a recasting of public space with oppositional elements, digital installations can create a 'counter-space' that underscores difference (McCann, 1999).

The methodology of *Art Intersections* aligns with interventions waged by people of color who have used cultural production as a means to 'humanize an inhuman environment' when faced with mass displacement, real estate speculation, and planning policies that fail to account for working-class voices. The exhibit content underscores the depoliticization of urban space, while also pointing towards the artistic convergence of digital and spatial interventions that magnify difference in public space. Consider an exhibit image of an elder woman sweeping and municipal workers whitewashing a wall impressed with a spray-painted portrait of Trayvon Martin in the embrace of the Virgin of Guadalupe (Figure 3). The image is aptly titled eRaces #4. In this erasure, artist Pablo Cristi seems to conjure Mexican muralist David Siquieros' *América Tropical*. The 1930s mural was infamously whitewashed by the City of Los Angeles soon after completion in order to censor its' controversial content; the depiction of an indigenous man hanging from a double cross with an American eagle perched on top. Conversant with the legacy of Los Angeles mural culture, *eRaces #4* underscores the politics of cultural erasure in urban space through the image of municipal workers and an *abuelita* solemnly sweeping away this poignant reminder of violence against Black youth (Cristi, 2016). In doing so, the image evokes the historical, spatial, and ideological legacies of expressive culture embodied in twentieth-century muralism.

Where communities without authoritative representation have lacked access to brick and mortar, they have adapted song, paint, and their own bodies to invoke claims to place. As a counterpoint to the ahistoricity of the white spatial imaginary, Lipsitz has described cultural expression and attempts to imbue space with public meaning by people who are regularly excluded from physical space as the Black spatial imaginary. For instance, examining the significance of street parades for African American musicians in mid-twentieth-century New Orleans, he writes, 'Taking to the streets was a quintessentially political act that deployed performance as a means of calling a community into being and voiced its values and beliefs' (Lipsitz, 2011, p. 64). Permeating space with expressive culture provided African Americans access to sites in which they were otherwise unwelcomed. In the context of a racialized geography, in which people of color were systematically excluded from particular spaces, musical improvization was a political act that called into question the meaning of place. Cultural historians have, likewise, drawn attention to the ways African American and Chicano/a communities have used street performance and mural art to combat the cold surfaces of freeway development in a reappropriation of form and function that promotes pride in the histories of communities adversely affected by their construction (Avila, 2014). These acts represent a visual taking


**Figure 3.** Courtesy of Pablo Cristi, *eRaces #4*, 2012.

of one's environment that question the logic of profit-driven development that occurs at the expense of people of color and, instead, replaces it with value measured by its usage.

Digital projection can be viewed as an extension of historical tactics waged by the dispossessed as they demanded different 'ways of seeing' (Berger, 1990). Where patterns of (dis)investment obstruct the participation of people of color from the web, and planning decisions cast them apart from their built environment, digital projection serves as a tool to render these erasures visible. However, they are unique from most forms of spatial pictorial expression in that they do not require official permissions and are accompanied by less risk than permanent changes to hard surfaces, such as freehand graffiti. The social theories of Henri Lefebvre, who argues abstract space becomes dominant when capitalism defines the appropriate meanings and activities that can occur in space, are also informative here (1984). Unlike exhibits that move art generated in public mediums to official spaces of high-culture, as in the 1980s movement of street graffiti from public walls to canvas in galleries for purchase, projection represents an ephemeral taking of the built environment removed from profit (Cresswell, 1992). Drawing from traditions of guerilla

projection, by casting images generated by and about people of color onto courtyards and administration buildings, the neutrality of public space is challenged and the needs of the public sphere materialize (Irazábal, 2008; Low & Smith, 2006; Mitchell, 2003; Susik, 2012).

Where the democratizing potential of the web is undermined by digital inaccess, pop-ups offer a means to bridge the racial digital divide by uniting space and digital media in ways that question persistent government disinvestment in communities of color. In the twenty-first century, patterns of racialized inequity have generated a spatialized politics of race with evolving consequences, particularly as it relates to developing communications technologies. As detailed in survey reports of the US Census, US Department of Commerce, and Pew Research Center, from the 1980s and into the present African Americans and Latino/as have been significantly less likely have internet access in their households than those who identify as Asian American and white (Nakamura, 2007; U.S. Census Bureau, 2013).[5] Recent research underscores that 'digital inaccess' is a manifestation of place-based racism akin to other forms of discrimination that disproportionately affect non-white people, such as environmental inequalities and disinvestment in building stock (Gilbert, 2010; Hong, 2016). Complicating other prerequisites to internet entry, such as access to a computer and the skills to maximize its use, a physical topology of 'on-ramps,' such as fiber optic cables, is far more likely to be found in white majority communities (Sandvig, 2012; Sterne, 2000).

Responding to barriers surrounding internet-use, people of color in working-class communities have developed innovative strategies that speak to both alternative access and variable-use of internet resources. For instance, in lieu of personal computers, low-income African American and Latino/a residents have turned to public resources, such as library terminals, to complete pertinent tasks requiring the internet, including accessing health information, researching government services, applying for jobs, and completing homework. More so, as an affordable alternative to personal computers, a significant portion of working-class people of color have adopted smart phones as their primary means for accessing the internet (Zickuhr & Smith, 2012). But inequalities remain. Even where the gap seems to narrow, users with standard dial-up or lower speed internet service are at a distinct disadvantage to those with high-speed internet. Working-class populations' disproportionate means for maintaining and repairing Wi-Fi capable devices, due to unaffordability and the lack of temporary means for access within their immediate spatial networks, pose another barrier to equalization. Ongoing economic and social costs are disproportionately burdensome for working-class users, resulting in 'dependable instability,' but they are also human agents who navigate these challenges to access in a myriad of ways (Gonzales, 2016).

Where mural art and performance generated by communities scarred by urban development could transform infrastructural inequalities into a tableau of minoritized histories, spatial interventions using digital projection, likewise, represent a remaking of place with the potential to highlight social struggle and foster community belonging. In these cases, working-class communities of color are the intended audience and subject of projections, but persistent digital divides serve as a formidable barrier to production. Whereas spatial interventions through occupation, performance, and mural art can manifest by employing everyday tools and resources in communities of color, designing digital pop-ups requires not only first-level digital access to information and communications technologies (ICTs),

but also second-level accessibility in terms of training and engagement (Robinson et al., 2015). This is a significant obstacle, but not insurmountable. As places with unique access to technology and digital literacy training, spaces of higher education offer a promising site to engage media production for spatial change (Bach, Shaffer, & Wolfson, 2013; Carpio, Luk, & Bush, 2013; Dixon et al., 2007; Hale, 2008).

Colleges and universities generally provide students access to computers and wireless internet while on-campus. Yet, a recurrent theme among college educators of media and technology studies are the uneven levels of access and familiarity with media resources among the college population, some remaining dependent on 2-hour loan periods of laptops from university libraries and reliant on their smartphones to write term papers.[6] This concern suggests that the spatial inequalities hindering equal access to new technologies in working-class communities of color have lingering effects on college-aged youth. Alarmingly, educators' concern points towards the continuation of digital inequality even when students' move within spaces of high digital access (Hargittai & Walejko, 2008; Jones, 2002; Jones, Johnson-Yale, Millermaier, & Seoane Perez, 2009).[7] Considering the links between skill-based computer usage and income, this trend has alarming consequences for the perpetuation of economic segmentation (Paino & Renzulli, 2013; Robinson, et al., 2015). As long as race and locational inequalities persist, schools will offer a critical space for either combating or maintaining spatial inequalities that reproduce unequal access to new technologies in communities of color (Sterne, 2000).

Although limitations remain, universities are well positioned to challenge digital inequality by providing youth of color and their allies opportunities to investigate manifestations of spatial injustice and to design digital humanities projects with the capacity for place-based interventions. Inspired by *Arts Intersections*, this was the goal of an on-campus digital installation I co-designed with students at Yale University in December 2014, *Digital Pop-Up! Latina and Latino Mobility in Twentieth Century California*. Through projectors, an interactive computer station, and a LED screen, students transformed the built environment of Yale's campus into an interactive web exhibition. At the center of the project were sharing Latino/a histories and demonstrating the potential for emergent technologies to expand how research is done, by whom it is produced, and for whom it is intended. Student projects built upon writing assignments examining the varied roles of mobility in Latino/a California. These included migrant theater produced by El Teatro Campesino, transnational movements within the sister cities of Tijuana and San Diego, the movement of mural iconography between San Diego and Los Angeles, multimedia photography of Latinas in urban space, activism among Los Angeles street vendors, the 1968 Chicano/a student walkouts in East Los Angeles, and the circulation of images pertaining to Filipina/o and Mexican American collaboration within the United Farm Workers movement. While foregrounding Latino/a histories, students organized the exhibit geographically, moving north from the U.S./Mexico border. In doing so, they provided an analysis of California foregrounding spatial relationships. Throughout the exhibit, themes such as the built environment, visual culture, political-economy, and activism further linked the projects to one another (Carpio et al., 2014).

Place was a key part of project design. More than a neutral backdrop, the setting was an important factor in framing the digital pop-up. Nestled in the center of campus, adjacent to the Center for Engineering Innovation and Design, students selected the Becton Plaza for projection as a symbolic space where technology, art, and the humanities meet at the

corner of a major public intersection. New Haven is the largest urban community in Connecticut, with a majority–minority population and concentration of 35% African American and 27% Latino/a residents (U.S. Census, 2015).[8] Where gates and key card requirements close off much of Yale's campus from a surrounding majority–minority population, physical and visual access to the Becton Plaza is maximized by its street view.

Likewise, the stakes of digital pop-ups are magnified by their institutional context. For instance, Yale University is an elite academic institution whose social capital is tied to narratives of selectivity and exclusion. In 2014, the year in which the exhibit was held, Yale held a 6% acceptance rate with an enrollment ratio of 9% African American and 9% Hispanic students, compared to a U.S. population of 13% and 17%, respectively (U.S. Census, 2015; Yale University, 2014).[9] Drawing national attention in the winter of 2015, Yale students held a 'March of Resilience' that highlighted racial tensions ignited by a campus fraternity who denied a young woman of color entry, a faculty email defending students who chose to wear Halloween costumes of racial caricatures, and a lack of administrative support for tenure lines in ethnic studies, among others. These incidents, and those simultaneously responded to by student activists at the University of Missouri, Ithaca College, University of Kansas, and Claremont McKenna College in the winter of 2015, underscore the exclusionary environments and hostile resistance encountered by students of color within the institutional context of higher education (Kingkade, Workneh, & Grenoble, 2015; Stanley-Becker, 2015; Swarns, 2015). They also point towards the specific place-context in which our digital pop-up operated.

As a history course cross-listed in Ethnicity, Race, and Migration, a university program with an explicit commitment to unpacking how communities of color have resisted their own marginalization, the course drew students allied with and coming from a student demographic more diverse than that typically associated with the university as a whole (Laguna, 2015). Given this dissonance, students had a unique opportunity to leverage campus resources to create a public-facing project intent on recasting who Yale is for, while also engaging new media to draw attention to legacies of spatial inequality. Using digital projection, the stone gray of the Dean's Office – a prominent example of the neo-gothic architecture found throughout Yale's campus – was painted in light to display murals, video, and photography of Latino/a expressive culture (Figure 4). Even if only temporarily, through emerging technologies the student curators recast the terms of meaningful histories and made claims to a campus that has historically excluded surrounding residents and students of minority backgrounds.

Through digital projection, student-curators centered Latino/a histories and claims to space that resonate with the legacies of place-based claims engaged by communities of color in California. Histories of the Chicano/a mural movement poignantly transported the expressive culture of *barrio* urbanism from the walls of southern California to the edifices of New Haven. The nested spatial interventions of this transformation in the built environment – one erected on the foundation of earlier Chicano/a muralists – was highlighted by one student, noting, 'These murals have now been introduced to Yale's campus … They have been featured in the walls that were once impenetrable by minorities in this country, and that is a radical movement within itself.' Another student created an interactive map and curated images of the 1968 East Los Angeles Walkouts, in which a multiracial student coalition of Chicano/a students and their allies advocated for courses that incorporated the Mexican American experience in school curricula. Underscoring the


**Figure 4.** Projection design by Fonzy Toro, photograph courtesy of Stephen Pitti.

ways that the mobility of collective bodies could transfer spatial meaning, even when confronted with police resistance, this exhibit pointed towards the power of coordinated action by youth, a historic link with particular significance in the wake of on-campus support of the Black Lives Matter movement. Other exhibits engaged social media to examine how Latino/a artists and activists seek to invoke changes in public policy and imbue place with social meaning. For instance, one student-curator choreographed a series of photographs posted to Tumblr and Instagram alongside sound clips from interviews she conducted with their artists/subjects in order to present a Chicana feminist perspective of urban mobility. Illustrating the ways digital projection can be used to change the meaning of a neo-gothic architecture previously viewed as domineering, she reflected, 'I was thrilled to see the images I curated being projected on the side of Yale's gothic SSS building. These were mostly images of Chicana women who come from my background, and it felt amazing to see two of my worlds clash in such a visually impactful way' Highlighted by the exclusionary context of Yale University, student-curators created a counter-narrative placing the legacies of spatial intervention at the administrative center of campus (Carpio et al., 2014).

If the digital pop-up allowed students to experiment with a format that could, potentially, open up new media projects to communities underserved by digital infrastructure and draw attention to spatial manifestations of inequality and intervention, it was still limited to those who could attend the event. Connecting physical and virtual publics, the student-curators created the Twitter hashtag #CaLatino (Figure 5). In her 2010 American Studies Association Presidential Address, Ruth Wilson Gilmore notes, 'While social media might produce interactions not available in the pen, paper, and print-media milieu, the face time required of group projects can powerfully ground the virtual social' (Gilmore,


**Figure 5.** Original image courtesy of Andrew Quesada, projection designed by Ivonne Gonzalez, photo courtesy of Tyler Rogers.

2011). Likewise, here, the combination of public exhibition and social media generated multiple grounds from which students could socialize, both beyond and within the digital world. This methodology is particularly relevant for projects targeting U.S. Latino/as who, according to a 2012 Pew Research Center survey of White, Black and Hispanic internet-users, exhibit the highest rates of participation on social networking sites at 72% of all Latino/a users (Duggan & Brenner, 2013). Tweets from those in attendance allowed an exhibit access point for those who could not attend the pop-up. Bridging public space and web space, twitter 'favorites' and 'comments' posted by those in virtual attendance, as well as in person, were read aloud throughout the evening. An advantageous outcome resulting from the #hashtag was a crowd-sourced digital archive of, an otherwise, ephemeral event (Carpio, 2014).[10]

A survey distributed within a week of the pop-up provides additional insight into the potential impact of digital projection for generating conversations about spatial and digital inequalities, particularly among college-aged youth. Several respondents emphasized the value of multimodal work. As described in one survey response, 'Projecting the images on buildings, using multiple formats for presenting ideas and material, inviting people in through twitter, was marvelous. I learned so much.' Others highlighted the ways diverse primary sources including text, visual, and oral sources could garner new historical

insights when brought together in a digital medium. As described by one respondent, '[the project] used different kinds of data very effectively.' Another emphasized the importance of bringing these projects to 'spaces that were once very exclusive.'[11] Likewise, students were overwhelmingly positive about the results of the exhibit, excited by the affirmative feedback they received, open to addressing audience questions in their final papers, and interested in continuing work in the digital humanities. Several have continued to take digital humanities coursework and have incorporated new media in their research agendas. At the same time, student analysis underscores some of the continuing questions these types of projects pose, including how to balance analyses with 'show and tell,' how to communicate the significance of the digital medium, and addressing the self-selectivity of those in attendance (Carpio et al., 2014).

Where ICT scholars have found low-rates of user-content generated by youth of color on the web, increasing their secondary digital access can foster student projects geared towards public interactivity. Student-curators recognized themselves as producers of new media, rather than purely technology consumers, who could leverage university resources to draw attention to Latino/a spatial histories (Salhotra, 2014; Schmidt Camacho, 2013; Wadewitz, 2013).[12] Their engagement in the digital pop-up reflects studies in education research arguing that civic engagement is a particularly effective learning practice for first generation college students (Kuh, 2008). Consider also the Social and Public Art Resource Center (SPARC) in southern California, which was founded by UCLA Professor Judy Baca to promote the examination, preservation, and innovation of collaborative art. Key to SPARC's efforts is a Digital/Mural Lab (DML), where local youth are trained in digital imaging techniques, artists are enabled to combine mural painting with computer-generated imagery, murals are preserved through digital printing, and new techniques for presentation of public art through 3D and virtual presentations are being developed.[13] By bridging secondary digital divides in training and engagement with new technologies, digital humanities coursework can draw on the legacy of spatial intervention waged by people of color in response to uneven development and expand college-aged youth's critical engagement with new media in ways that undermine exclusion from the built environment. This intervention is especially urgent in urban universities, where the communities surrounding campuses are most likely to be those at the other side of this gap. Addressing accessibility requires not only increasing primary access to ICTs, but also incorporating the creative power of those traditionally excluded from its realm.

## Conclusion

Through the tactic of bridging cyberspace and public space, digital pop-ups offer one tactic for mitigating the racial digital divide. It is not meant to be a solution, but rather a response to a white spatial imaginary that would render people of color, the poor, the homeless, or other marginalized people invisible. Pop-ups have the potential to meet people where they are, providing an entry point to digital projects that is denied to those without internet access or experiencing dependable instability. It incorporates the tactics of justice struggles throughout the Americas, which have claimed public space through demonstrations and art to make political, cultural, and citizenship claims (Irazábal, 2008). Where architecture privatizes space and masks difference through a fortress effect, color and light can paint alternative narratives onto elitist spaces (Davis, 1990).[14] In a similar vein, by claiming

authorship in cyberspace, young people of color and their allies can recast their assumed place within the built environment, as well as the web, from that of passive consumers to active producers. As sites where technological and text resources are uniquely available, museums and schools have been particularly powerful sites from which to launch agendas that advance digital accessibility and media literacy.

## Notes

1. In doing so, I seek to help bridge a gap in digital studies and American studies underscored by McPherson (2012).
2. For a compelling analysis of transmedia organizing and its expression in physical space, see Costanza-Chock (2014).
3. The digital exhibit can be viewed online at http://gourmetintersections.com/about/.
4. My analysis of the event is shaped by a telephone conversation held with Adriel Luis, 26 March, 2014.
5. Native American, Native Hawaiian, Alaskan Natives, and Pacific Islanders have been omitted from these reports. Thom File, 'Computer and Internet Use in the United States,' *U.S. Census Bureau* (May 2013); Lisa Nakamura notes that surveys failing to account for non-English-speaking Asian immigrant populations, such as those taken by the Pew Research Center, exclude a segment of the Asian American population which is far less likely to have internet access than the aggregate.
6. Author was a participant in the summer workshop. For more on FemTechNet, see FemTechNet Collective, 'FemTechNet: A Collective Statement on Teaching and Learning Race, Feminism, and Technology,' Frontiers: A Journal of Women's Studies. in press.
7. Research suggests that despite the increase in opportunities for sharing user-produced materials on on-line platforms, the likelihood that young people will distribute content is negatively compounded with marginal race, gender, and socioeconomic status.
8. The 'White alone' population in New Haven is 42.6%, significantly higher than Connecticut as a whole at 77.6%.
9. These figures do not include international enrollment, which would bring the percentage of enrollment for African American and Latino students down further.
10. An archive of social media engaging the hashtag #CaLatino can be viewed at https://storify.com/GenevieveCarpio/digital-pop-up-latin-mobility-in-california-histor.
11. Participants were sent an anonymous online survey, authored using Survey Monkey. SurveyMonkey Inc, Palo Alto, CA, www.surveymonkey.com.
12. These actions are akin to the efforts of Wikipedians, foremost Adrianne Wadewitz efforts to address the gender gap in Wikipedia. Conversations with students show that reflective and community-based project options in the introductory courses for ER&M, as well as Latino/a New Haven, taught by Alicia Schmidt-Camacho, were particularly formative in this regard.
13. Site visit by author to 'Social and Public Art Resource Center-SPARC,' 22 April 2016. For more on the DML's activities see http://sparcinla.org.
14. In Los Angeles, for example, 'bland architecture' combines with 'carceral' elements to create a 'fortress effect.' Mike Davis argues that the goal of the fortress effect is 'to obliterate all connection with Downtown's past and to prevent any dynamic association with the non-Anglo urbanism of its future' (Davis, 1990, p. 158).

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