## DISCOVERING A HYBRID PUBLIC REALM THROUGH AMBIENT STORYTELLING AND PLAY

# JENNIFER STEIN

## Discovering a Hybrid Public Realm through Ambient Storytelling and Play

Text by Jennifer Stein

Digital ephemera weave in and out of our everyday lives, shaping an emergent, often invisible public realm that exists at the intersection of physical and digital space created by growing networks and embedded technologies. We can choose to participate in, contribute to, and discover this hidden layer within the city through the smart mobile devices that many of us carry throughout the day. As emerging technologies become more personal, accessible, and globally pervasive, an ambient public realm of both individual and collective everyday experiences has emerged, which can be playful, storyful, social, and critically engaging. Hidden within these experiences are fictional characters in story worlds, social activists, or co-conspirators, all of whom largely remain strangers in the physical world, but are perhaps considered fellow citizens in the digital layer that exists in parallel to that of the physical.

In the hybrid space between the digital and physical worlds, augmented layers of reality are being colonised by networked public communities, artists, storytellers, and activists. This invisible public realm exists within what urban geographer Edward Soja called 'thirdspace': 'a fully lived space, a simultaneously real-and-imagined, actual-and-virtual locus of structured individuality and collective experience and agency'. At the same time, these hybrid thirdspaces bear the significant influence of psychogeography and the phenomenology of space and place, and the ethos of the avant-garde art movement from the 1950s to the 1970s. The international artists' group Fluxus described a desire to bring art to the masses, using chance to shape a viewer's experience in the city. Before Fluxus, the Situationist International used situations, happenings, and games to engage urban audiences in moments of art or cultural production. Following this earlier work, the reappropriation of urban space for experimentation, play, and moments of life has been a core experience design principle of many playful story worlds that exist between the digital and physical realm.

The mobile smartphone and other new technologies have given new life to many theories of quotidian space, as well as tenets of art movements that specifically engaged and challenged notions of the public realm. This chapter will trace the historical, social, spatial, and contextual aspects of the connection of people, networks, and ubiquitous and pervasive computing towards moments of wonder and exploration in urban spaces through ambient storytelling and play, using four case studies from Los Angeles and Tokyo.

#### New technologies in the public realm

Over the past two decades, the emerging era of computing has revealed new ways of experiencing the world around us and accessing information within it. Computers and digital technologies have moved outside of our homes and offices and into our pockets and the spaces we traverse every day, contextualising both our social interactions and physical locations through new forms of ambient storytelling and place-making. Networked and invisible computing in its present and most common form – the mobile smartphone – has fundamentally changed our experience of everyday life in the public realm. We negotiate both our private and public personas as we navigate urban space, in which personal, context-aware and location-based media and applications move ambiently between the centre and periphery of our attention.

The cultural assimilation of computing everywhere has further led to the field of 'urban computing', in which mobile and pervasive computing are considered specifically within the context of the city. With this, there has been a shift beyond the utilitarian underlying principles of ubiquitous computing towards more playful, collective, and enchanted experiences located within urban public space. These new personal technologies, embedded with Bluetooth, GPS, light sensors, accelerometers, near-field communication sensors, and processing power that can nearly match that of desktop computers, connect us to new hybrid spaces at the intersection of the physical and digital realms – ambiently – anytime and anywhere. This presents new opportunities to connect people more deeply to 'place' through participatory and embodied interactions with emergent forms of storytelling and play in urban spaces.

With these devices, as curator and scholar Christiane Paul observes, we have begun to see "new platforms for cultural production providing an interface through which users can participate in networked public projects and enabling the formation of ad hoc communities". Sociotechnical platforms and networked digital technologies have supplied tools for meaning-making and for creating agency in the public realm, providing a new materiality for designing pervasive media experiences, and for presenting new ways of authoring space and discovering place through story and play.

#### Ambient storytelling and playful interactions in the city: case studies

Artists, storytellers, and game designers have designed an array of experiences that highlight how urban computing and mobile smartphones can reactivate the urban public realm by remapping our relationship to spaces through storytelling and ludic experiences; collectively and individually, actively and passively. These kinds of experiences are often ambient and contextual, relying on the affordances of the urban form or space – dense urban space, social space, and public space – whilst relying on the invisible networks that buzz with digital information. This notion of the ambient as a space for storytelling references the Situationist International and constructed situations within 'ambiences' or surroundings, and has been further theorised by architect and scholar Malcolm McCullough as an 'ambient commons'. He elaborates on this through his 'Twelve ways of understanding the ambient'', a few of which are particularly relevant to a discussion of ambient storytelling and playful interactions in the public realm: "That which surrounds but does not distract..." "An emergent effect of embodied interaction design..." "An environment replete with non-things..." "Intrinsic (environmental) information, enlivened by mediation..." "A continuum of awareness and an awareness of continuum..."

Ambient stories and ludic experiences within the city have taken shape in a number of ways over the past decade, in which each approach tries to reveal enchanted spaces, contested spaces, and spaces of shared consequence in different, context-specific ways. These forms include: platforms for collectively authoring spaces, such as spatial annotation projects; location-based and location-specific mobile ambient storytelling; location-based mobile games; augmented reality experiences; and social location tagging/sharing, all of which blur the lines between the digital and physical public realms by engaging city dwellers with a persistent layer of ambient information.

The projects below highlight different ways in which new technologies have engaged city dwellers in two very different cities -Los Angeles and Tokyo – in an emerging hybrid public realm that relies on playful ambient experiences. Each project asks: "How have emerging technologies reconnected us to urban space through storytelling, or transported us to different places? Where and when do we play, and with whom?" Much of this work focuses on playful social experiences. and points towards how we now encounter others, often strangers, in the ambient public realm. Each project, in its own way, produces the appearance of magical or enchanted experiences specific to the urban cultural form of each city, enabled by technology but not for technology's sake. These experiences incorporate encounters with digital fictional characters, physically located strangers searching for digital artefacts, and characters that blur the lines between the real and the digital. In each project, though, the goal is to use the physical city as the backdrop for digital stories, and for play to emerge and be experienced through the use of new technologies.

#### Mogi (Tokyo, Japan 2003):

*Mogi*<sup>2</sup> is one of the earliest examples of location-based mobile gaming that used the physical city form (in this case, Tokyo) as a social, digital game board for a collection-and item-exchange game. By using early location awareness and mapping technology, *Mogi* encouraged players actively to move through the city, often finding new routes to and from home or work to collect new digital artefacts that would appear on their mobile phone map, while also inspiring social interactions and teamwork with nearby players. Players could collect digital artefacts when they were within 400 metres of them in the physical world, communicate with other players with a built-in chat client when proximate to another player, and could form teams and trade digital artefacts with others.

Mogi was considered an environmental game, rather than simply a location-based game, in that the objects in the digital world corresponded to contextual physical locations, often also with a temporal correlate. Certain objects like animals or flowers could be found only near city parks, and only at certain times of day. Other objects would appear on the map with the explicit purpose of bringing two players together, encouraging serendipitous meetings in the real world while playing within the digital *Mogi* world. *Mogi* demonstrated a key moment in nascent thinking about hybrid physical and digital experiences in the public realm, and specifically in Tokyo, due to its dense urban fabric and its advanced Keitai, or Japanese mobile, culture.

#### Tracking Agama (Los Angeles, 2005)

*Tracking Agama*<sup>3</sup>, set in downtown Los Angeles, is an early example of location-based mobile storytelling that used fictional characters and non-linear narrative to guide participants through an alternate experience of the city. Designed before the smartphone era, the project used a combination of SMS messaging, voice calls/ voice messaging, and blog entries, to cleverly usurp the need for GPS while creating a sense of location-specificity. *Tracking Agama* led its participants on a narrative-based exploration of Los Angeles, in pursuit of a fabled (and fictional) urban researcher, 'Agama'. Participants were invited to use a bit of detective work to hack into Agama's voice messaging/note-keeping system, whilst receiving SMS messages and calls from Agama and his assistant/arch-enemy.

Tracking Agama was based on five public spaces spread across Los Angeles, many of which were points of public art or cultural significance. Participants were directed to a starting location after discovering a mysterious blog post from an LA urban researcher. At Agama's last known location, Union Station, participants first had to find a code embedded in a sculpture, and, after texting in the code to Agama, were led to the next location. Each location in downtown Los Angeles led to another code embedded in the urban fabric, asking participants to look more closely at the city around them, and perhaps to see things they might otherwise not notice. Along the way, they were able to hack into Agama's research voice memos, when they discovered signs of an increasingly agitated and paranoid Agama.

#### CityStory (Los Angeles and Tokyo, 2008)

Using Italo Calvino's novel *Invisible Cities* as the jumping-off point for this storytelling experience, CityStory<sup>4</sup> invited participants to look more closely at their cities, and make visible the invisible city elements described in Calvino's cities. Though mediated through a mobile smartphone, *CityStory* was fairly low-tech, relying on the social media platform Twitter, and a participant's mobile cameraphone, to engage citizens in crowdsourced, playful acts of ambient storytelling. *CityStory* specifically focused on participants in Los Angeles and Tokyo, creating a juxtaposition of imagery between two large world cities and highlighting a cinematic poetics of hybrid digital/physical space.

Over the course of 14 days, participants received a text prompt via Twitter at a random time each day based on one of Calvino's city descriptions, and were asked to submit 5–30 seconds of mobile video in support to visually represent elements of the city described in the tweet. For example, when receiving and reading the *CityStory* tweet "...the way your gaze runs over patterns following one another as in a musical score where a note can be altered or displaced"<sup>5</sup>, participants were encouraged to stop for a moment, look around, and reflect on the literary text as a way to reimagine it within their own city forms. The videos were captured, tagged with keywords, and uploaded to a website by participants for each of the 14 city texts over 14 days, providing a cinematic display of imagery that demonstrated a thoughtfulness and attention paid to urban space, if only for a fleeting moment in one's journey through the city. By envisioning Calvino's *Invisible Cities* through the lens of one's own city, a connection was made between a fictional world and the physical world in real time and real space.

#### Keitai Mizu (Tokyo, 2013)

Keitai Mizu ('mobile water') specifically addresses the potential for mobile-phone-mediated public art in the urban realm. Designed to address environmental awareness in Tokyo, this "mobile treasure hunt for art" made participants aware of the rivers of Tokyo that had been forced underground by aggressive city development. A number of artists were commissioned to create water-based creatures in Jingu-dori Park, a small park in Shibuya, from found objects, both real and imaginary, that may be native to the rivers. With light storytelling and gameplay designed into the experience, participants searched the park for the distributed pieces of art and were asked to photograph and submit only the images they thought were native creatures to Twitter (@keitaimizu) and Instagram (keitaimizu).

Keitai Mizu was part of a larger public art project, entitled *Shibuya: Underground Streams*. This public art project invited "audiences to reconsider how local places are shaped by the urban waterscape" through "a series of interventions through video projections, soundscapes, sculpture and a mobile treasure-hunt."<sup>7</sup> The use of the mobile phone, though only loosely related to the overall experience of capturing art, established an important context for participation and collaboration by creating a playful layer to the exploration of the "submerged narratives of the rivers" in the city, while making participants more aware of the changing environment around and below them.

#### Our augmented futures

The case studies above, which specifically focus on ambient storytelling and play in Los Angeles and Tokyo, are by no means comprehensive and might even seem a bit dated. But each project shows a progression of ideas, over the past decade, about how new technologies can be used to connect people with cities for both personal and collective engagement. These examples are also meant to show how cultural specificity impacts the kinds of projects created and the themes that arise in different cities, in different parts of the world, and how each city can offer unique experiences based on the form of the city itself.

Looking to the near future, there is a growing shift towards projects that engage people collectively in public space, using mobile devices for augmented reality experiences. These augmented realities present a new emerging platform for ambient storytelling and play, one that provides a glimpse into the otherwise invisible digital public realm that exists throughout the physical space of everyday life. The wildly successful *Pokémon Go*, and its predecessor *Ingress*<sup>8</sup>, have demonstrated global engagement based on a shared mobile platform that is fundamentally rooted in discovery of public art and cultural landmarks. Though *Pokémon Go* might attribute much of its success to the existing Nintendo/Pokémon property on which it is based, the use of the smartphone camera to 'see' the invisible digital layer atop physical, public space points to new expectations for how we will engage with technologies in the public realm in the years to come.

In 2010, the artist collective Manifest.AR designed and released a mobile augmented reality application called *We AR in MOMA*<sup>9</sup>, which placed a virtual and digital layer of art viewable through the mobile phone application within the Museum of Modern Art (MOMA) in New York. Manifest.AR designed this app – which was not commissioned or sanctioned by MOMA – to challenge the notion of what art is, of which works of art get to hang or stand within the physical space of a museum, and to play with the concept of public or community-created art existing within private space through a digital layer viewable only through a mobile device.

Since earlier experiments to subvert the art world, the use of augmented reality and other emerging interactive technologies have become more widely used for public artworks. Most recently, the artist Ivan Toth Depeña created *Lapse* (2016), an augmented reality art installation in Miami, which he describes as a "decoder or magnifying glass that reveals hidden gems throughout the built environment"<sup>10</sup> In one of the six components of *Lapse* called 'The Visions', Depeña created a set of publicly visible murals, which serve as augmented reality markers readable by a mobile device, to access another layer of art, presenting both physical and digital access to the art, while also serving as a signpost for the hidden digital layer. Similarly, Re+Public's No Ad (2011) acted as an ad-blocker during one's subway commute by recognising "subway advertisements, block[ing] them out, and [replacing] them with curated digital art" through an augmented reality mobile application.

Early mobile and location-based projects encouraged and challenged citizens to see, hear, and experience public space though the new contextual and mediated lenses of personal technologies. The rise of augmented and virtual reality technologies will continue to challenge our existing notions of public and private space and reshape our near-future experiences of the city. With projects like We AR in MOMA, Lapse, and No Ad, there is an increasing element of subversion – and inequity – made apparent through works of public art that exist without being explicitly visible, and only then made visible through the availability of a technological viewing device. These often playfully subversive projects nonetheless raise important questions about the role new technologies will play in the commissioning of public art projects that require access to mobile devices, and therefore, who has access to this emerging 'digital public realm' within the physical spaces of the city. With this, it is ever more important to bear in mind - as artists, curators, city leaders, citizens - the negotiations we must make as participants in both the physical and digital public realm.

#### Footnotes

- <sup>1</sup> McCullough (2013) p.12, figure 1.2
- <sup>2</sup> Mogi was designed in 2004 by French game design company Newt Games.
- <sup>3</sup> Designed and implemented at University of Southern California's School of Cinematic Arts, by Ruston, S., Stein, J., Newman, B., Carter, W., Furmanski, T., and Millican, T. (2004-2005)
- <sup>4</sup> Designed and implemented by the Mobile and Environmental Media Lab at the University of Southern California's School of Cinematic Arts, in collaboration with Keio University's Design Media program.
- <sup>5</sup> The City of Zora, from 'Cities & Memory', in Invisible Cities.
- <sup>6</sup> Designed by Spatial Dialogues and Boat People Association. Artists include Larissa Hjorth, Ryuta Nakajima, Simon Perry, Kate Rohde, Kate Shaw, Fleur Summers, Masato Takasaka, Toshi Tomita and Yasuko Toyoshima.
- 7 www.spatialdialogues.net/tokyo/keitaimizu
- <sup>8</sup> www.nytimes.com/2016/06/09/technology/want-to-capture-a-pokemon-look-behind-that-tree.html
- <sup>9</sup> www.sndrv.nl/moma
- <sup>10</sup> www.artsy.net/article/artsy-editorial-this-augmented-reality-app-reveals-art-in-public-spaces
- <sup>11</sup> www.creators.vice.com/en\_us/article/this-augmented-reality-app-blocks-advertisements-withdigital-art

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## Jen Stein

Jen Stein is a design researcher examining the implications of ubiquitous technologies on the built environment. She completed her Ph.D. in Media Arts and Practice at the School of Cinematic Arts, University of Southern California, where she combined theory and practice to speculate about near future scenarios for Interactive Architecture. Her research explored how the technologies now commonly embedded within architectural spaces could be used to create more personalized and enchanted experiences for inhabitants.

Jen is also currently an adjunct faculty member in the Interactive Media Division and a research associate in the Mobile and Environmental Media Lab at USC's School of Cinematic Arts. Her research explores design for interactive architecture, ambient storytelling, and mobile experiences. She holds an M.A. in Media and Communication from Goldsmiths College, University of London.

### Claire Doherty (Editor)

Claire Doherty is an arts director, producer and writer.

Previously, Claire Doherty was Director at Arnolfini (2017-19) and was the founding Director of Situations. Over the past decade, Situations emerged as one of the UK's most innovative and pioneering arts producers, commissioning and producing temporary and long-term public arts projects, creating public art strategies and visions for city-wide initiatives and leading publishing and research initiatives to improve the conditions for, and skills to produce, new forms of public art worldwide. Claire has developed an international reputation as a leading thinker in new approaches to public art policy and planning, and is dedicated to engaging those for whom the arts might have seemed irrelevant or inaccessible through transformative art and cultural experiences; advocating for the social value of the arts, and finding ways to catalyse positive change in specific places.

Claire was awarded a Paul Hamlyn Foundation Breakthrough Award for outstanding cultural entrepreneurs, 2009, and appointed MBE for Services to the Arts in the New Year's Honours List 2016.

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