Asphalt Games: Enacting Place Through Locative Media

by Michele Chang
Senior Design Researcher
Intel Research
2111 NE 25th Ave.
Hillsboro, OR 97124
U.S.A.
Tel: +503 712 5225

and Elizabeth Goodman
Design researcher
Intel Corporation
HF3-96 5200 NE Elam Young Pkwy
Hillsboro, OR 97124
U.S.A.
Tel: +503 696 1843
Fax: +503 696 1231

Related URL: http://www.asphalt-games.net

KEYWORDS
locative media, performance, public space, social cartography, games

ABSTRACT
Locative media - the representation and experience of place through digital interfaces - opens frontiers for artistic expression in public space. With New York as a gameboard and a website prompting play, players of *Asphalt Games* conquer turf on an online map by performing and documenting game moves on real-world streets. They vie for territory through physically and socially risky games combining found objects, traditional street games, and social commentary. As a hybrid of physical and digital performance, *Asphalt Games* exists through the interplay of social and spatial play. It suggests that locative media move beyond pinpointing location to enacting place as a medium for expression.

BEYOND THE GRID
In maps or satellite photographs, the New York City street grid appears as crisp as when first built nearly two centuries ago. Yet then as now, the order seen from above collapses into the noise and tumult of street level life. Until the 1980s, New York streets, though sometimes dangerous and derelict, were often playgrounds [12]. Now, street games such as stickball, marbles, and hopscotch are no longer as prevalent. New York’s children still play in the streets, but the recreational activity of choice is now likely to be shopping.

Attempts to “reclaim the streets” as a site for non-commercial play have flourished recently, as evidenced by the international Reclaim the Streets movement’s slogan of “celebration as direct action; dance as resistance” [11]. The Cacophony Society, self-proclaimed “dada clowns rewiring the neural circuits of the community” have branches in several American cities [3]. Following McKenzie’s theory of performance as at once artistic practice and technological imperative [15], public play makes alternatives to the norm of efficiency visible.

Beginning in the 1950s, a group of artists and intellectuals in France decided that utopian ideologies of urban planning concealed a metropolis of regimentation. They called themselves the Situationists. As one slogan put it in 1967, “The guarantee that
we will not die of starvation has been purchased with the guarantee that we will die of boredom" [13]. In wandering the streets according to game-like rules or momentary whims, they sought to revitalize urban experience by constructing new "situations". Situationist interventions employed randomness and satire. The most prominent of these experiments was the dérive, or "drift", in which individuals abandon normal everyday practices in favor of alternate acts dictated by the urban terrain and encounters found therein [5].

Inspired by the Situationist techniques of derive [5] and detournement [6] as well as contemporary psychogeographic experiments in algorithmic walks [10], we designed and built *Asphalt Games*, first as students at New York University’s Interactive Telecommunications Program in 2003 and then with the sponsorship of Intel Research in 2004. *Asphalt Games* is a location-based game in which players vie for territory on an online map of New York City by playing their own, modern day "street games" on real-world street corners. Gameplay started with "friends-only" trials at New York University and continued through open invitations on weblogs and New York events mailing lists such as the nonsensenyc list [17]. By the end of active play in October 2004, the game had over 80 registered players.

The game was intended to encourage "ordinary" New Yorkers to imagine, perform, document and share physical responses to an increasingly regulated and surveilled public sphere. As designers, we hoped to change the way both active players and the physical and online onlookers understood public spaces in New York. By linking game success to exploration of territory, we also hoped players would explore new neighborhoods.

We define locative media as the representation and experience of place through digital interfaces. The ever-advancing geographic positioning capabilities of mobile devices and the embedding of geographic location into online experience are both changing the way we experience the world around us. Embedded in mobile devices, technological capabilities are especially changing the way we experience public spaces. As the physical and digital become ever more entwined, we cannot evade the responsibility to describe location beyond physical coordinates. Grounded in the human experience of play, hybrid games such as ours acknowledge that spatial knowledge becomes social, and the social can become spatial.

**HOW TO PLAY**

Based on techniques for improvisational theater games, game moves ("stunts") have three components: an object, an action, and a theme. The stunt generation engine randomly selects these components from a database, and the player may "roll again" as often as she chooses until an exciting combination presents itself. An object can be any item often found in a city, such as coffee cups, newspapers, and fire hydrants. An action can be any traditional American outdoor game such as hopscotch, hide-and-go-seek, and tag. A theme is an event or situation prevalent in metropolitan life, such as “happy hour”, “vice”, or “hailing a cab.” It is a wild card altering the interpretation of the other components.

As in charades, players must imaginatively communicate all three components through props, setting and a sequence of actions. We generated the original set of components from research into the history of street games as well as our own experience (as long-time New Yorkers) of the city. However, after the first iteration of the game interface, we added a suggestion feature so that players could enrich our list and take more ownership of the game.

Each stunt is associated with a node, which is the street corner in New York where the stunt took place. Nodes are marked on the virtual map with their owners’ tags [see figure 1] Stunts are always situated within a specific neighborhood or even street corner, so they must be judged in context. The same behavior that is amusing in a children’s park might be less so on a deserted residential street. Imaginative performances - and thus game standing - are improved by clever use of the surrounding landscape.

Players document their stunts through digital photographs uploaded to the website. The photographs and accompanying description inspire community ratings. Players may only rate a stunt once, but they can comment as much as they like. The comments become a more nuanced counterpoint to the flat ratings, and often record debates over the meaning and value of a player’s actions.

If a player wishes to take over a corner already owned by another player, s/he must create and document another stunt using the same elements as the first. The whole game community must then decide which stunt wins the “rumble”. There is no final disposition of the city, so one street corner may change hands as many times as there
are players who want it.

**HYBRID GAMES**

The ability to link location to digital devices, coupled with an increasing interest of urbanites in mass public events (such as Flash Mobs [14] and, in the U.S., the bicycle crowds of Critical Mass [2]) have sparked the development of games that bridge the online and "real" worlds. Hybrid games - sometimes called "mixed-reality games" [cite Benford] - that combine physical and digital play arise from this recent cultural and technological watershed.

"Asphalt Games" exists within a growing movement of New York-based hybrid games addressing Manhattan’s characteristic grid. The first, 2002’s "Noderunner" [8], uses the invisible wireless spectrum as its field. As played in Manhattan, it sent players racing from north to south on a treasure hunt for access points. In comparison, "Asphalt Games", designed in 2003, uses street corners as territory markers for players to capture and control. And in the case of 2004’s "PacManhattan", [18] Manhattan’s gridded streets stand in for PacMan’s maze.

Like many other physical-digital games, "Asphalt Games" is based on a familiar mode of play. For example, Blast Theory’s "Can You See Me Now?" [1] is an updated chasing game (like Tag) in which offline players attempt to catch their online counterparts. "Asphalt Games" is a mix of traditional turf games (like Capture the Flag) and performance games (like charades).

Compared to day-length games such as "Noderunner", "Asphalt Games"’ social component moved in slow motion. Without a set beginning or end, there was no incentive for intense, frequent participation. Stunts were initiated and conducted within a week, but a month could go by between stunts for some players. In such a long-running game, momentum is created through a scarcity of space, not time. If games are inherently driven by competition, then "Asphalt Games" competitive spirit suffered from too much time and too large a gameboard.

As game designers, we took a risk in not verifying the spatial location of play. Unlike most other location-based games, "Asphalt Games" is based on self-reported positioning. Players’ decisions to ‘cheat’ prompted online dialogue about the nature of play. Have you really played the game if you weren’t in New York City? Have you really played the game if you used Photoshop? The self-policing nature of the player community determined the answers. Through individual votes and comments, the community of players controlled the course of the game.

**RISK AND PUBLIC PLAY**

As adults, powerful sets of social norms regulate our behavior at nearly all times. Games, however, can excuse adults (and certainly children) from adhering to ordinary customs. Games create their own worlds that temporarily overwrite everyday rules. For that reason, most public games for adults advertise themselves *as games* to excuse potential transgressions. Often, games require distinctive clothing or equipment and are played in a special zone (a park or court). These safeguards legitimize otherwise abnormal behavior.

But playing invented games on street corners - and then uploading documentation to the Internet - can be socially uncomfortable or even dangerous, especially for people who may not identify themselves as risk-takers. Players are required to act unusually in places often unsanctioned for anything but transportation, commerce or (in the case of a fire station) public safety. In Lower Manhattan, succeeding generations of youthful rebellion have permanently altered neighborhood norms. We hoped that introducing "Asphalt Games" in there would minimize any fears. However, interviews with selected players revealed that social anxiety about self-exposure significantly deterred play. One player would only participate on her rooftop (a dubiously "public" place). She feared a loss of professional credibility if acquaintances witnessed odd behavior.

The rumble between Parade and Monkey exemplifies this tug-of-war between verve and social convention [16]. Monkey staged a stunt on his rooftop, which happened to be on a street corner. He wore a tank top made from an "I heart NY" plastic bag (used to "take out" food from restaurants) and played a game of "kick the can" to satisfy the elements: "I heart NY", "Kick the Can", and "Take Out." A few weeks later, challenger Parade staged a more elaborate performance [19, see figure 2] and defeated him. Wearing restaurant workers’ uniforms and carrying restaurant take-out bags, she and a partner played "Kick the Can" on bicycles, watched by neighborhood children. The last image of her stunt depicts a chalk drawn mural on the street depicting an "I heart New York" drawn along with a monkey figure with X’d out eyes [see figure 3]. In an interview, Parade told us that Monkey’s retreat to the roof, which
she saw as cheating, inspired her challenge.

When locative media leaves the gallery, it leaves behind the social safeguards surrounding designated art spaces. Because we cannot control the crowds around us in public places, we must consider the role of bystanders, police officers, and other people outside the game. Given the time, effort, and potential risk involved, *Asphalt Games* active players (as opposed to those who only visited the site) tended to be socially confident, with little fear of police attention and spare time to coordinate elaborate stunts. We suspect that the game's demands excluded those feeling less secure, whether about police attention or from loss of social status online and off.

*Asphalt Games* exposes participants on the street *and* on the website. Photographs from the website could be easily copied and repurposed, continuing the visibility of transgressive actions. One player even reused a stunt photo for an emailed party invitation, thus extending the reach of his stunt into the rest of his social life.

*Asphalt Games* took place within a wider context of players’ social life; the photographs and stories that were its products served multiple purposes for groups of friends. For some players, the photograph was the end of the game. Carefully composed and shot, it promoted their cleverness and creativity. For others, the photograph was secondary. Blurry and often confusing, the photographs taken by these players reveal not showmanship but the opposite: an experience deliberately left inaccessible for those who were not physically there.

Player interviews suggested two divergent models of public behavior, technology, and spectatorship. One group saw the dual public spaces of street and website as sites of performance/applause: stunt as opportunity to win social status. For another group, the street/website represented surveillance/punishment: every stunt as dangerous loss of control over self-representation. The game design does not favor either model, giving players power over planning stunts, reporting location, and documenting actions. Though players in Asphalt Games cannot control who witnesses their behavior, they are ultimately the instigators and actors in their own plays [4].

**WHAT WE LEARNED**

Like other hybrid games, such as *Can You See Me Now?*, *PacManhattan*, and *Noderunner*, *Asphalt Games* takes place both online and on the physical streets of a city. Yet *Asphalt Games* moves beyond location as constant - a stable set of coordinates that unambiguously 'locates' us on a gameboard - to consider how player activity constructs 'place' out of data.

Ironically, we had spent considerable time designing the map as both a spatial overview of game activity, and as a visual introduction to the game for newcomers. We imagined that our coordinate-based map would serve as a kind of canvas or wall for players to tag, much as graffiti writers leave their names on city walls to prove their presence. And some of that behavior happened. One group of players systematically took over a string of subway stops on the L line - a joke visible only on a map.

However, visitors to the site did not often use the map. Instead, they navigated through lists of most recent or most highly ranked stunts. Due to technological limitations in the pre-Google Maps days, players had to manually enter cross streets into web form - not click on the map - to initiate stunts. Text entry moved the focus of interaction off the map. However, one unexpected result of the freeform text entry was that players began to play "off the map." They ignored the implicit boundaries of the map viewing area and instead created private stunts that never reached the gameboard.

The tension between a general diagram and the specificity of human experience is a common theme in hybrid media. Maps can rework the complexity and occasional ugliness of the territory they represent into abstracted beauty. Through them, we run the risk of masking the complexity of embodied experience with well-intentioned simplification. Maps are clear, which is why they are so useful in navigation. Maps are clear, which is why they often lead us astray. Focusing on building and maintaining a spatially organized gameboard distracted us from supporting the social games motivating the activity.

Through the comments and ratings, the stunt pages play out negotiations around the meaning of neighborhoods and spaces. They also play out deeper conversations about fairness, friendship, and artistic merit. Though we as creators are responsible for the website, this partial loss of control proved unexpectedly fruitful. Instead of communicating our own vision for New York neighborhoods we loved, the game revealed aspects of the city that we could never have imagined.
Many genres of locative media structure interaction with places through information delivery. Consider "place-based storytelling" or "tour guide" applications [9] in which participants uncover a pre-existing set of stories as they move through space. In tour guide projects, the creator(s) link pre-determined content to specific locations, which their audience access through geographic movement. Tour guide projects rely upon an ownership model for location-based experience, in which the creator becomes the sole storyteller or "owner" of a place, and the audience passive spectators. In contrast, "Asphalt Games" and other collaboratively generated locative media projects function as a medium through which people tell their own stories.

When we start to tell stories is not merely a series of coordinates, but rather a medium for expression. One player's (Dface) use of the Roosevelt Island Tram in a stunt requiring 'Man-purse', 'Jumprope', and 'Hangover' reflects an understanding of a particular place and an interest in performing this knowledge within the space of the game [7, see figure 4]. In the player's stunt, we see him board the tram (which links Midtown Manhattan to Roosevelt Island). He rides across with his manpurse (a Samsonite overnight traveler) strapped over his shoulder. Advancing through the images, we then see that he has reached the other side and begins to jumprope through the strap of the man-purse. In the background, we see the air tram hovering above the ground as it makes its return journey, standing in for 'Hangover.' This stunt rated high in the eyes of the community, receiving a 4.7 out of a possible 5 (at time of writing; stunt ratings continually change) when it was first judged. We believe that its popularity is based on its linguistic and locative play.

The distinction between embedded versus emergent experiences of place calls into question the very nature of designing locative media for public spaces. If digital interventions are to have an affect on the physical world, it is crucial to address the ways humans understand and enact the limitations and constraints of public places. Indeed, as we came to understand, the medium’s power ultimately resides in changing everyday movement through space.

Combining ordinary street corners and random stunt elements into a funny or exciting stunt can be difficult. When we work hard at locative play, we reflect on the historical, social, and spatial dimensions of well-known neighborhoods and practices. When we are acting out these reflections, we reveal something about ourselves through the places in which we act them. Location becomes a communicative medium in its own right.

Many locative applications treat location as a canvas - a place to tell; a place to mark; a place to store. The dynamism of "Asphalt Games" as a locative experiment comes from the active interpretation of familiar places, or better still, manipulation of their attributes. Embodied play, like the "cheating" of the system itself, is perhaps best seen as a metaphor for the way in which locative media can be enacted, as something to be gamed, misused, or perhaps overthrown. Location no longer as notebook, frame, text, or coordinate, but a medium reshaping itself and the people who invoke it.
Figure 3. Final photograph in a series documenting challenger, Parade’s stunt. This photograph would have appeared in the same format as in figure 2, but was downloaded from the site as an image only.

All images copyrighted © Chang and Goodman

NOTES


17. http://www.nonsenseny.com/


**AUTHOR BIOGRAPHIES**

MICHELE CHANG is Senior Design Researcher with Intel’s People and Practices Research Group. Committed to using ethnographic research as a means for considering user needs, Michele designs systems which address the social implications of new technologies. Her current work focuses on the convergence of mobile technologies in the public realm and its affect on social and physical space. Past work includes an exploratory design study of hybrid games and the social aspects they highlight in the negotiation of online/offline experience. Michele holds a Bachelor of Arts in Art History from Reed College and a Masters of Professional Studies (MPS) from the Interactive Telecommunications Program at New York University’s Tisch School of the Arts.

ELIZABETH GOODMAN’s design, writing, and research focuses on critical thinking and creative exploration at the intersections of new digital technologies, social life and urban spaces. She has a Bachelor of Arts in Fine Art from Yale University and a Masters in Interactive Telecommunications from New York University. Most recently, her "Familiar Stranger" project was part of Spectropolis: Mobile Media, Art and the City. Her work has been shown at Paris' la Cite des sciences et de l'industrie, as well as at a number of international academic conferences such as CHI, DIS and Ubicomp. She is now a design researcher at Intel’s User Centered Design group.