

An aerial photograph of a city street intersection. A red traffic light is visible on the left side of the intersection, and a green traffic light is visible on the right side. The street is paved with asphalt and has white lane markings. There are several buildings and trees visible in the background.

Merging Digital and Urban Playspaces

An Introduction to the Field

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Games are integral to human culture, but the strong success of video and computer games over the past 20 years can blind us to the significance of the physical environment as a playful space. If computers and consoles circumscribed games as activities performed in digital spaces, the emergence of mobile technologies reinserts them into physical environments. Walking through urban spaces while playing games on a location-aware, Internet-enabled, mobile device encourages unprecedented ways of exploring and navigating urban and digital spaces. In these games, communication, collaboration, and social interaction occur in a combination of the physical and the digital.

Playful activities that use mobile technologies as interfaces and the physical space as the game board have been called different things. The most common terms are pervasive games, mixed reality games, augmented reality games, and big games. For instance, Montola (2005) defines pervasive games as games that expand the borders of the “magic circle” spatially, temporally, and socially. Examples of pervasive games, according to Montola, are *Botfighters*, *The A. I. Game*, *Visby Under*, and *Can You See Me Now?* For Nieuwdorp (2005), pervasive games such as *Botfighters* and *I Like Bees* “broaden the game world to include elements of everyday life” (p. 1). Similarly, Benford et al. (2005) suggested that “pervasive games extend the gaming experience out into the real world” (p. 54) and pointed out *Human Pac-Man*, *ARQuake*, *Savannah*, *Botfighters*, and *Can You See Me Now?* as examples. In another article, Benford et al. (2005) use the term “mixed reality game” to define experiences such as *Can You See Me Now?* and *Uncle Roy All Around You*, in which online players interact with players located on a city’s streets (p. 391). More recently, Frank Lantz (2006) defined the term Big Games as “large-scale, real-world games [that] oc-

cupy urban streets and other public spaces and combine the richness, complexity, and procedural depth of digital media with physical activity and face-to-face social interaction.” His examples of Big Games include *Mogi*, *Pac-Manhattan*, and *Conquest*.

From this brief review, it is clear that there is not much consensus on what to call these games. This diversity of nomenclature is certainly related to the novelty of the field and the need to understand and differentiate these games from other major game genres, such as video games and mobile games (i.e., playing solitaire on a cellphone). In response to these attempts, we propose a classification of mobile location-aware games that accurately reflects the game space, time, and technology. So far, the term “mobile game” has referred exclusively to games played on the cell phone screen, that is, where the play space is restricted to the tiny mobile screen. Similarly, a video game takes place solely on the computer or the TV screen. Of course, one can always argue that all games also take place in the players’ imagination (Fine, 1983), but in this case we are referring to the mediated game space where the players’ actions take place. In both mobile games and video games, the screen is the primary interface that mediates the relationship between the game player and the game.

With the popularization of locative technologies, however, new games were created in which the game space extrapolates the cell phone screen and pervades the physical space of the player. Historically, physical spaces have always been the primary play spaces, so defining pervasive games or mixed reality games as games that use “real world elements” brings nothing new, since most games before the advent of video games used physical world elements. These traditional games, however, have always had a defined play space. For example, board games are framed by their board, and other physical games such as *Four Square* and *Hopscotch* take place inside the area demarcated on the ground by the players. Huizinga (1955) named this “consecrated spot” for game play (the game playground) the magic circle (p. 10). Obviously the play activity has always challenged the borders of the magic circle. When players, for instance, talk about the game during the game or create their own rules on the fly that change the game (Hughes, 1983), they are “metagaming” (Salen & Zimmerman, 2004, p. 481). The metagame refers exactly to this relationship between the game and outside elements (players’ imagination, or communication among players) that challenges the borders of the magic circle. So if games already used physical spaces as the game board and if games already challenged the magic circle, what’s new about locative games that use mobile technologies as interfaces?