Katie Salen

Pokéwalkers, Mafia Dons, and Football Fans
Play Mobile with Me

This paper addresses a theoretical reconfiguration of experience, a repositioning of the techno-social within the domains of mobility, games, and play, and embodiment. The ideas aim to counter the notion that our experience with videogames (and digital media more generally), is largely "virtual" and disembodied – or at most exclusively audiovisual. Notions of the virtual and disembodied support an often-tacit belief that technologically mediated experiences count for nothing if not perceived and valued as human. It is here where play in particular can be put to work, be made to highlight and clarify, for it is in play that we find this value of humanity most wholly embodied. Further, it is in considering the design of the metagame that questions regarding the play experience can be most powerfully engaged. While most of any given game's metagame emerges from play communities and their larger social worlds (putting it out of reach of game design proper), mobile platforms have the potential to enable a stitching together of these experiences: experiences held across time, space, communities, and bodies. This coming together thus represents a convergence not only of media, participants, contexts, and technologies, but of human experience itself. This coming together is hardly neat, nor fully realized. It is, if nothing else, multifaceted and worthy of further study. It is a convergence in which the dynamics of screen play are reengaged.

Play is a structuring activity, the activity out of which understanding comes. Play is at one and the same time the location where we question our structures of understanding and the location where we develop them. (James J. Hans)

Three Vignettes for the Future

Tyler Luera knows a little something about the networked life of a teenager. On any given day he is a writer, designer, media producer, consumer, critic, friend – Gamer. His networks are simultaneously global and local, spanning SMS, YouTube, Twitter, Xbox Live, Yahoo email, Civilization player forums, his school's lacrosse team and the local YMCA, where he works after school. He has long known that the networks he inhabits define his access to people, resources, and ideas. He also knows that his mobile phone is the key to participation – teen salvation in a screen-sized box.

Rai and her friends Joe and Celia text each other the minute they wake, making plans to meet up to work on breaking the mathematical code they discovered yesterday hidden in the source code of a Wikipedia page of an obscure Russian poet. Each had gone home the previous evening and messaged the code across their various social networks, in the hopes that someone, somewhere, might recognize its pattern. Hundreds of their peers tweeted in response. It was now up to them to make sense of the data they'd received. Is school supposed to look like this?

Globally distributed, inter-generational teams of amateurs and experts collaborate by the thousands, the hundreds of thousands, and even the millions, to make political decisions, to solve mysteries, to create art, and to predict and forestall health pandemics, terrorist attacks, and economic crises. Participants do not simply gather, master and deploy pre-existing information and concepts. Instead, they work with the collected facts and viewpoints to actively author, discover and invent new, game-fueled ways of thinking, strategizing, and coordinating. No one knows everything, says one player. But it is almost certain that everyone knows something.

Today

Of all the transformational catalysts brought about by the rise of digital connectivity, perhaps one of the most fundamental is the ability to form groups quickly and easily. "New technology has enabled new kinds of group-forming," says Shirky, and boy does he have it right. From sites like Google Image Labeler and Meetup.com to ARGs like PERPLEX CITY (2005) and the massively-multiplayer problem-solving game FOLDIT (2008), the free and ready participation of a large, distributed group with a variety of skills has enabled a new way of thinking about what we, as humans, can do together.

Yet where the web and its widgets have ruled the enabling of groups in recent years, mobile devices in their various forms (cell phones, PDAs, mobile game platforms like the PSP and DSi, etc.) are poised to lay ubiquitous claim to the group-forming domain. Consider a few statistics: mobile technologies around the world total 4 billion subscribers, or 60% of the world's population (TomiAhonen Consulting 2009). Europe has passed 100% per capita penetration and leading countries like Hong Kong, Taiwan, Israel and Italy are past the 140% subscription rate per capita. One in four Africans has a mobile phone subscription, a statistic made possible by the sharing of one phone handset in a village among several users. Sharing anchors the creation of new groups (Shirky again).

Within social networking sites like MySpace and Facebook the total value of *mobile* social networking is twice as large as the total of internet-based online social networking. This includes networks like Flirtomatic, Itsmy, Twitter and Qik, as well as truly innovative social-mobile platforms like Japan's Mobage Town and South Korea's Cyworld Mobile (TomiAhonen Consulting 2009). Design for mobility is increasingly the design of *community.* Thus, when people go mobile, they rarely do it in order to be alone.

The design of community is the territory of game design today, and as a result requires game designers to address a theoretical reconfiguration of experience, a repositioning of the techno-social within the domains of mobility, place, play, and embodiment. Doing so may seem to run counter to the notion that our experience with videogames (and digital media more generally) is largely 'virtual' and disembodied – or at most exclusively audiovisual. Notions of the virtual and disembodied support an often-tacit belief that technologically mediated experiences count for nothing if not perceived and valued as *human.* It is here where play in particular can be put to work, be made to highlight and clarify, for it is in play that we find this value of humanity most wholly embodied. As Brian Sutton-Smith (2008:124) has written,

> Play is neurologically a reactive itch of the amygdala, one that responds to archetypal shock, anger, fear, disgust, and sadness. But play also includes a frontal-lobe encounter, reaching for triumphant control and happiness and pride. Play begins as a major feature of mammalian evolution and remains as a major method of becoming reconciled with our being within our present universe. In this respect, play resembles both sex and religion, two other forms – however temporary or durable – of human salvation in our earthly box.

We don't often consider the reconciliatory function of games and play, their ability to bring together the real and imaginary, their role in our coming to be. Instead, games, like mobile media, are most often accused of placing players in a state of disembodied separation – virtually engaged rather than *real*-ly engaged. But we may have had it wrong all along. The recent blossoming of mobile technology from a down and dirty solution for workplace connectivity to an enabler of community formation and participation has the potential to reconfigure our thinking about the integrative and human nature of play and mobility.

Playful Futures

Genevieve Bell from Intel and Paul Dourish from University of California, Irvine (2008), social scientists with a particular interest in ubiquitous and mobile computing and the practices surrounding new media, began work on a paper that explored science fiction as a cultural backdrop shaping technological design. Through a comparative reading of sci-fi shows like *Dr. Who, Star Trek,* and *Planet of the Apes* and design research texts, they argued that design researchers by and large have tended to see problems of cultural context as issues to be taken up once technological infrastructure rolls out in the world. In the case of mobile gaming, for example, questions centered on secure data exchange, cross-platform compatibility, user interface design, location sensing, etc., have tended to take center stage. Questions of space, place and corporeality, embodiment and presence, on the other hand, have tended *not* to be the kinds of issues raised when mobile, as a technological infrastructure, was first dreamt up.

In imagining a technologically inscribed future it is easy to treat cultural questions as a consequence of design practice – remote questions to be later encountered – rather than questions that are *prior* to the practice itself. By way of example, Bell and Dourish ask readers to consider the provision of location-based services on handheld and portable devices, noting researchers' emphasis on the privacy implications of location monitoring. Must a device's location be reported to a central infrastructure or to other users in order to achieve localization? Through what strategies might users take control of this information and its reporting? While Bell and Dourish agree that such questions are important, they point out that the questions already prespecify certain relations, namely decision-making occurring in the context of commercial exchange with a service provider. As they note, questions

of individuality and the nature of one's relationships to others, to commercial entities, and to states, and questions of responsibility for ensuring the accuracy, provenance, and protection of data, and questions of the rights to particular forms of spatial representation are *already figured* by a technological solution. (Bell/Dourish 2008:12)

Thus, it is critical to recognize that any description of a technology is already social and cultural (Ito et al. 2006). The questions that have grown up around screen media, games, and mobile technology broadly are ones that arise not in the deployment of technologies but in the imagining of them – an imagining that arises *before* design. According to Bell and Dourish (2008:12)

Social and cultural forces do not merely come into play after a technology has been deployed, shaping its diffusion and appropriation; rather, social and cultural are already thoroughly implicated in how a technology is imagined and designed.

Thinking about mobile gaming in an age of web 2.0, then, requires a deep understanding of the kinds of social and cultural futures caught up in mobile technology's original imagining. It requires that explicit attention be paid not only to the ways in which mobile play comes to be embedded in society, but also to play as a force shaping the very imagining of a mobile society itself.

Play

It is worth spending a few moments on the topic of play, as it is the engine that drives the design of games and increasingly, the design of groups and therefore of communities. Play arises from the design of rules, which organize player action. Think of a child walking down the sidewalk, zigzagging along, stopping and hopping as she encounters a sidewalk crack. Play arises as the child follows a rule that

demands she not step on a crack (for fear of breaking her mother's back!). When rules are combined in specific ways, they create forms of activity for players called play. Play is therefore an emergent property of rules: rules combine to create behaviors that are more complex than their individual parts (Salen/Zimmerman 2003).

During play, action is both stylized and limited in ways that encourage a pushing against the rules. As philosopher James S. Hans (1981:5) notes: "The role of play is not to work comfortably within its own structures but rather constantly to develop its structures through play." – Play requires rules but constantly seeks its own release. Players explore the limits of the system not only in order to perform within it, but also in an attempt to transform it.

The transformative nature of play must therefore be part of any imagining about the current and future state of mobile gaming. This imagining, popular within mobile game development communities, includes an envisioning of a technological apparatus linked to the production of media objects and experiences. In a recent presentation on the future of mobile games, for example, Nokia executive VP Tero Ojanpera estimated that there are more than one billion people worldwide who will first access the Web through a mobile phone (Leigh 2009). As a result of this speculation, games that integrate their play with web-based features like location information and media libraries (image, music, video) on the phone have become a core focus for Nokia. An mobile game called DANCE FABULOUS (2009) combines music, dance and game elements by allowing users to play along to their music library. Another game turns user-generated photos of streets into racecourses for a driving game where players can race against each other. In both of these examples, the design of mobile games arises out of a technological imagining valuing the shared storage of media on a single mobile device. Transformative play is linked to the language of code, operating as a baseline strategy for remixing media assets in ways that aspire to give them new meaning.

Handheld gaming king Nintendo, on the other hand, roots its transformative mobile imaginings in the physical world. A new peripheral device for the DS and DSi called the 'Pokéwalker' – soon to be seen being clutched in the small sweaty hands of POKÉMON HEART-GOLD- and SOULSILVER (2010)-players – links physical movement to digital game play. As players take to the sidewalks they can "train" one of their digital Pokémon, earning experience points for each step taken. The device, which resembles a Pokéball, interfaces wirelessly with Nintendo DS infrared and converts footsteps into "watts," which can be used to catch wild Pokémon and find items as part of the play. The Pokéball locates the transformative nature of play in the bodies of participants, linking an expenditure of energies across physical and virtual space.

Both the Pokéwalker, which fits into an emerging genre of games called exergames, and media mix games like *Dance Fabulous* rely on social and cultural practices implicated in mobile technology's early design. The imagining of lightweight, feature-laden mobile phones that could be accessed anytime anyplace, for example, was also an imagining of communication across far-flung, multiple, and partial communities with physical and digital dimensions (Ito et al. 2006). "It is time to consider a new era," wrote Howard Rheingold (2002), "how the peripatetic mobile users of the Internet communicate with the members of their social networks and communities". Then, as now, communication was seen as a central feature of how social life in a mobile world would be supported (Taylor 2006).

This vision continues to play out in the kinds of mobile games and mobile social applications being produced today. Puma's *Together Everywhere*-campaign, which ran during the Euro 2008 Championship, brought together supporters of the 16 national teams in real time. Fans could sign up for a service that would immediately place them in a mobile teleconference with ten of their friends each time their favorite team scored. Perhaps to extend the odds that the con-

versations moved beyond screams of "Goooooooooooooal!," and "F***ing amazing, man," the service also allowed fans to connect with ten anonymous supporters of their national team chosen at random.

To what extent fans were able to game the system by using the calls to save minutes they would have otherwise spent on non-football related conversation might never be known (Two fans I spoke with were non-committal on the subject.) But the mobile campaign is a good example of the growing importance of linking design with the social life of a game. Game studies researchers Nick Yee (2008) and T. L. Taylor (2006) have both pointed out that players within connected, multiplayer game spaces are social laborers and act as central productive agents in game culture. Mobile-enabled participatory experiences like Together Everywhere thus highlight a shift in thinking about where the site of mobile game design resides. Is it on the device? In the data tracked and stored? In the community that rises up around the game? In the players? The answer is all of these, and more.

The Social Life of Games

Designers of fantasy role-playing games like *Dungeons & Dragons* and *Magic: The Gathering* first modeled an approach to game design that took into account a game's relationship to outside elements – player attitudes, play styles, social reputations, social contexts, and so forth. Kids pouring over *Pokémon*-strategy guides or discussing the configuration of their decks are taking part in activities considered part of the 'metagame', a term that refers to the way a game engages with elements outside its formal space of play. DROP 7 (2008)-iPhone players who play *Sudoku* on the subway home as a way to hone their in-game skills are engaged in DROP 7's metagame, as are the four DS-equipped ten year-olds who trash-talk each other during a networked round of MARIO KART (2005).

Understanding how to design for the metagame is a key consideration for game designers generally, but is of special significance for those designing mobile games today. The connected, collaborative, physically-enabled, context-sensitive, and above all social nature of mobile plus web makes this platform combo especially suitable for metagame-rich experiences. It is difficult, in fact, to imagine a platform *more* suited to the design of game experiences that span physical and virtual space, leverage the social labor of players in ways that reinforce and extend the game experience, allow players to easily form distributed groups for synchronous and asynchronous participation, and generate, store, track, and visualize data in ways that improve player performance within the game. It sounds almost too good to be true, which is part of the rub. Mobile games with meaningful metagames are difficult to design – to date there are only a handful of examples to look to (e.g. BOTFIGHTERS (2001), MAFIA WARS (2009), LINE RIDER IRIDE (2008), or the numerous TEXAS HOLD'EM variants) and even fewer that have enjoyed a strong commercial release. Design for the metagame requires that one understand that the play of the game occurs within an ecology of experiences, only a subset of which can be anticipated in advance.

In an essay titled "Metagames," written for *Horsemen of the Apocalypse. Essays on Roleplaying*, game designer Richard Garfield presents a useful model for thinking about metagames. In it, he defines metagame as the way in which "a game interfaces outside of itself." Within this definition, Garfield (2000) argues that the following four categories make up a metagame framework:

1. What a player brings *to* a game
2. What a player takes away *from* a game
3. What happens *between* games
4. What happens *during* a game other than the game itself

To: What a Player Brings to a Game

Players always bring something to a game, sometimes in tangible form and sometimes not. For example, players of many location-based games bring with them phones with specific capabilities: camera, Internet connectivity, Bluetooth, video, email, messaging, and so forth. The phones often contain software that functions like a piece of equipment in the game, as when a player brings a ball and bat to a pick-up game of baseball. This software might be a Nokia product like *Friendview* or *Upcode*, an iPhone app like *QR Code Reader*, or a custom piece of software like *7Scenes*, a GPS platform for mobile games developed by the Waag.

Today's mobile-savvy players bring social media tools with them as well – Twitter, Facebook, Google Talk – which they can use in any number of ways before, during, or after a game to exchange information, socialize, document, or even cheat. These same players also bring membership in various online and offline communities, reputations, status and a variety of other social attributes that can influence their interactions with others during the play of the game.

A player usually has some level of choice in what to bring to a game, though some resources are mandatory: no GPS-enabled device, no geocaching. The selection of resources for a game is a process that players often enjoy. Consider the number of hours iPhone aficionados spend curating their collecting of apps.

While this category of "To" might seem very broad, Garfield organizes what players bring to a game into the following way:

1. *Game Resources* refers to necessary game components, such as a certain model of Smartphone, a data plan, QR codes, or even physical reflexes.
2. *Strategic Preparation or Training* includes studying an opponent's playing style or memorizing levels.

3. *Peripheral Game Resources* refers to optional elements like game guides, cheats, and knowledge of play patterns. These resources are often created and shared among a game community, either through 'official' channels or unofficial ones, such as fan sites.

4. *Player Reputation* is the final category of what players bring to a game, and is often not voluntary. Are you known to bluff, collaborate well, or take advantage of weaker players?

From: What a Player Takes Away from a Game

Players always take something away from a game. It is not uncommon, for example, to play a game for some kind of *stakes.* Winning a stakes game might mean taking away something quantitative, like prize money or standings in a formal competition, or the stakes might be something less tangible, like gloating rights or social status among a group of players. Sometimes, a player takes something away after just a single game. Other times, victory might emerge from a series of games: *best two out of three.* Large-scale tournaments can span weeks, and many mobile games that have an ARG component, for example, can span months. The seriousness with which players take a game is affected by how much the current game affects another game, particularly within a ladder structure or other organized contest. This aspect of the metagame can have a strong positive or negative influence on player attitude and performance (Salen/Zimmerman 2003).

Players also take things away from a game unrelated to the stakes, such as the *experience* of the game itself. A player's experience might serve to validate or contradict their beliefs about an opponent or about the game as a whole, thereby influencing future games. Crafting play experience into a narrative, a player can also take away the story of the game: the way victory was seized from the jaws of defeat (or vice versa), spectacularly good or bad moves, the bizarre occur-

rences that happened during the course of play. *I can't believe how long it took to capture that darn semacode!* Certain mobile games, like those developed by Blast Theory, often make a retelling of a game experience an explicit part of the game. Of course, players can also take away *resources* for future games, whether it is the knowledge about how the game works, an Inbox full of SMS messages that can be studied like a strategy guide, membership in a team, or an archive of images that can be reused in a future round of play.

Between: What Happens Between Games

The space between games is filled with many overlapping metagame activities that can add value to the core play experience. For many players, the activities that take place between games can be as important as what happens during a game. Players commonly reflect on strategy, training, or planning for the next game. *I've got to build a better team next time.* Planning what to bring to the next game, whether that involves studying a game map, upgrading a data plan, or planning a new play strategy, are all-important between-game activities. But not everything that happens between games is a solitary pursuit. Because of the networked status of most players today, metagaming will likely include players pouring over status updates on Facebook, Tweeting, and texting each other about what happened last game, spreading stories, and building reputations.

During: What Happens During a Game Other than the Game Itself

This category of the metagame is quite diverse, and refers to the influence of real life on a game in play. There are many factors external to a game, which enter into the experience of play, factors that are always present and often quite powerful. Among the ways that the metagame occurs during play are social factors such as competition

and camaraderie, or the physical environment of play such as bad cell phone reception, temperamental software, or a Bluetooth cluttered Starbucks. Trash talking, playing "head games," and exploiting player reputations all affect the metagame as well. Because so much of mobile play lends itself to documentation within social media tools, player reputations can rise and fall in real time, in often very public ways. A player of MAFIA WARS that tries to distract an opponent via a Twitter stream of vociferous insults is playing the metagame, although perhaps not in the most sportsmanlike of ways. Players within the community may choose to speak out against this type of play. When they do, they too are participating in an aspect of the metagame.

Conclusion

Play consisted of ideas, not just of actions; it became something inside my head, something subjective, something that forever afterward affected my existence in peculiar but positive ways (Sutton-Smith 2008:84).

It is in considering the design of the metagame in the age of mobility that the question of the reconciliatory function of games and play is perhaps most powerfully engaged. While most of any given game's metagame emerges from play communities and their larger social worlds (putting it out of reach of game design proper), mobile platforms have the potential to enable a stitching together of these experiences: experiences held across time, space, communities, and bodies. This coming together thus represents a convergence not just only of media, participants, contexts, and technologies, but of human experience itself. This coming together is hardly neat, nor fully realized. It is, if nothing else, multifaceted and worthy of further study. It is a convergence in which the dynamics of digital play are reengaged.

References

Ahonen, Tomi T./Moore, Alan (2009): *Communities Dominate Brands. Business and Marketing Challenge for the 21st Century*, http://communities-dominate.blogs.com/brands/2009/02/bigger-than-tv-bigger-than-the-internet-understand-mobile-of-4-billion-users.html.

Alexander, Leigh (2009): "GDC. Nokia's Ojanpera Talks Mobile Gaming's Future", http://www.gamasutra.com/php-bin/news_index.php?story=22886.

Bell, Genevieve/Dourish, Paul (2008), "'Resistance is Futile'. Reading Science Fiction alongside Ubiquitous Computing", http://www.dourish.com/publications/2009/scifi-puc-draft.pdf.

Garfield, Richard (2000): "Metagames", in: *Horsemen of the Apocalypse. Essays on Roleplaying*, ed. by J. Dietz, Sigel: Jolly Roger Games, 16–22.

Hans, James S. (1981): *Play of the World*, Boston: Massachusetts UP.

Ito, Mizuko/Okabe, Daisuke/Matsuda, Misa (Ed.) (2005): *Personal, Portable, Pedestrian. Mobile Phones in Japanese Life*, Cambridge/London: MIT.

Rheingold, Howard (2002): *Smart Mobs. The Next Social Revolution*, Cambridge: Basic Books.

Salen, Katie/Zimmerman, Eric (2003): *Rules of Play.* Cambridge/London: MIT.

Shirky, Clay (2008): *Here Comes Everybody. The Power of Organizing without Organizations*, London/New York et al.: Penguin.

Sutton-Smith, Brian (2008): "Play Theory: A Personal Journey and New Thoughts", in: *American Journal of Play* 1/1, 82–125.

Taylor, T. L. (2006): *Play between Worlds. Exploring Online Game Culture.* Cambridge/London: MIT.

Yee, Nick (2008). "Maps of Digital Desires. Exploring the Topography of Gender and Play in Online Games", in: *Beyond Barbie and Mortal Kombat. New Perspectives on Gender and Gaming*, ed. by Y. Kafai, C. Heeter, J. Denner and J. Sun, Cambridge/London: MIT, 83–96.

BOTFIGHTERS (2001), Digiment Games,
    Mobile Phones (Wireless Java).
DANCE FABULOUS (2009), Nokia, N-Gage.
DROP 7 (2008), Area/Code Entertainment, iPhone.
FOLDIT (2008), University of Washington, Transmedia.
LINE RIDER IRIDE (2008), Jonathan Bettis, iPhone.
MAFIA WARS (2009), Zynga, Facebook.
MARIO KART DS (2005), Nintendo, Nintendo DS.
PERPLEX CITY (2005), Mind Candy, Transmedia.
POKÉMON HEARTGOLD AND SOULSILVER (2010),
    Nintendo, Nintendo DS.

Biography
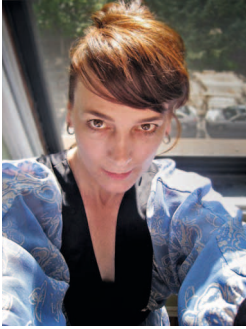
Katie Salen, PhD
Professor at the Parsons New School for Design, Director of the Center for Transformative Media, and Executive Director of the Institute of Play

Research:
Game Design, Games and Learning

newschool.edu/parsons/faculty.aspx?id=48715
salenk@newschool.edu

Publications:
– *The Ecology of Games. Connecting Youth, Games, and Learning*, ed. by K. S., Cambridge/London 2007.
– *The Game Design Reader. A Rules of Play Anthology*, ed. by K. S. and Eric Zimmerman, Cambridge/London 2005.
– *Rules of Play. Game Design Fundamentals* (with Eric Zimmerman), Cambridge/London 2003.