

Article

The Gift that Keeps on Giving:
Google, Ingress, and the Gift of Surveillance

# **Nathan Hulsey**

Joshua Reeves

North Carolina State University, US. nlhulsey@ncsu.edu

University of Memphis, US. jreeves4@memphis.edu

#### **Abstract**

This article analyses *Ingress*, Google's new massively multiplayer online game, as indicative of an emergent economy that calls for the datafication of one's mobile life in exchange for the gift of play. From this perspective, *Ingress* is simply suggestive of broader sociocultural transformations in which citizens must submit to pervasive surveillance in order to participate in contemporary economic and political life. Turning to Roberto Esposito's recent work on gift-giving and communal exchange, we explain how Google "immunizes" itself from its consumer community by continuously collecting that community's gift of surveillance while structuring its own conditions of reciprocity.

#### Introduction

"The world around you is not what it seems"—or so the advertisers of Google's new massively multiplayer online game (MMO), *Ingress*, would like you to think. Released in November 2012, *Ingress* is a cutting-edge game that uses players' real-time geographic coordinates and social networking platforms to enable players to cooperatively contain a fictional invasion of digital "alien matter." On the surface, *Ingress* is simply a hot new game that calls on players to use social media and GPS-enabled mobile devices to coordinate their movements across virtually layered hybrid spaces. Yet as many journalists, activists, and watchdog organizations have noted, *Ingress* is also one of the most seductive and prolific data-mining tools to be introduced in the last decade (Hindman 2013; Hodson 2012; Kolb 2013).

This essay will analyze *Ingress* as an exemplary site of an emergent form of digital economic exchange—one that requires the "datafication" of one's mobility and communicative action in exchange for the gift of play (see Lycett 2013). To describe the unique features of this exchange, we will tease out some of the cultural and political implications of "hybrid space" platforms like *Ingress*. Hybrid spaces integrate users' real-time geographical data with online social networks (de Souza e Silva 2006), allowing multiple users to coordinate through—and thus muddy the boundaries between—real and virtual space (de Souza e Silva and Frith 2011; Gordon and de Souza e Silva 2010; Wilson 2012). Similar to augmented spaces (Manovich 2006), data and the lived environment are inseparable in hybrid space: removing locational and social data would effectively terminate the space (de Souza e Silva 2006). In the case of *Ingress*'s gamespace, data is not merely layered onto locations; rather, the gamespace itself depends on the flows of data embedded within it. The ubiquitous capture and analysis of users' movements is a necessary feature of hybrid space, augmented reality applications like *Ingress* (also called location-based mobile games, or

LBMGs), as they require their users to submit to the datafication of their movements in public (and often private) space. This opens up the possibility for new forms of productively governing the mobile playing-subject, as LBMGs like *Ingress* thrive on the surveillance and redirection of player mobility through targeted commercial and non-commercial spaces. Through its embedded game mechanics, *Ingress* encourages players to actively participate in a surveillance community while also normalizing data mining and surveillance as a valid exchange for the privilege of play.

This article follows Bart Simon's (2006) call to approach gaming practices as embedded in broader social and cultural processes. As such, our argument will unfold in several stages. First, we introduce Ingress through the lens of hybrid space and LBMGs, describing how the game's capital potential is tied to its ability to pervasively monitor and redirect the living movements of its playing subjects. After we briefly analyze how players' assent to this surveillance complements citizens' more general willingness to exchange ubiquitous state surveillance for the elusive gift of security, we interpret these developments as indicative of an emergent economy in which pervasive surveillance is the primary medium of exchange. From this perspective, *Ingress* is only suggestive of broader social transformations in which citizens must submit to diverse surveillant apparatuses in order to participate in contemporary economic and political life. Yet *Ingress*, because of its unique status as the world's most cutting-edge LBMG—not to mention the fact that it is directly plugged into the data coffers of Google, the world's most ambitious corporate data collector—is a game that provides a privileged site of analysis for how citizen-subjects willingly submit to the datafication of their mobile lives. Finally, we turn to Roberto Esposito's theories of gift-giving and community reciprocity in order to consider the sociopolitical implications of this development, arguing that Google "immunizes" itself from the community on which it capitalizes by continuously collecting and redirecting that community's gift of pervasive surveillance—a gift, most importantly, for which Google structures its own conditions of reciprocity.

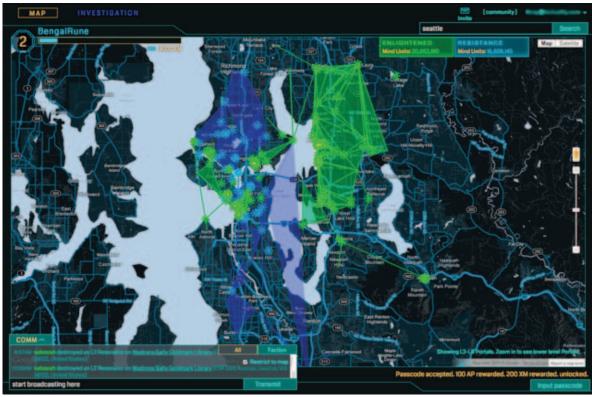
## Ingress and the Mobile Playing-Subject

Ingress plays with several different game design genres; it is a multiplayer location-based mobile game(LBMG)—a game that utilizes GPS-tracking systems, locational data, and mobile devices—that also incorporates augmented and alternate reality (Deterding et al. 2011) components. As an LBMG that operates as an alternate reality game (ARG) with augmented features, *Ingress* layers game mechanics and narrative devices over real-world locations and events and it is reliant on situated social and geographic networks (de Souza e Silva and Hjorth 2009). ARGs like Ingress, therefore, are often described as pervasive games, where the boundaries of play directly align with physical locations and real-world events (Montola, Stenros, and Waern 2009). T.L. Taylor and Beth Kolko (2003) note that ARGs operate as examples of "boundary play" (Nippert-Eng 2005) in which players accept gamespace as a transgressive liminality through which they negotiate, and often intentionally muddy, the porous areas between "virtual" and "real" activities. Oftentimes ARGs incorporate non-players, such as bystanders, law enforcement, and family members, into the gaming experience. And personal technologies—such as fax machines, cell phones, pay phones and public meeting spaces—add additional layers into augmented reality gameplay by disrupting the experiential borders between gaming and everyday life (Stenros, Waern, and Montola 2012; Taylor and Kolko 2003).<sup>2</sup> In fact, as a number of scholars have noted, it is often the thrill of disrupting everyday routines with performative play that attracts players to pervasive ARGs (Montola et al. 2009; Stenros et al. 2012). These games, therefore, thrive on media saturation and utilize it as a basis for merging simulation-based play into everyday activities, thus creating environments in which gameplay is

<sup>&</sup>lt;sup>1</sup>LBMGs have come to the forefront as a new brand of playful mobility that creates new dynamics of networked spatial practice (Chan 2008; Gazzard 2011; Licoppe 2009). LBMGs like *Ingress* work as a type of mobile interface that helps constitute the kind of *hybrid space* that we have described throughout this essay (de Souza e Silva 2006). In *Ingress's* particular brand of hybridity, game mechanics, player mobility, and interface design work in concert with one another to recontextualize social spaces as commodities (Lefebvre 1991) while thriving on synoptic surveillance tactics.

<sup>&</sup>lt;sup>2</sup> One might consider the police detentions and arrests that have been made as players engage with *Ingress* (Starr 2012).

inextricably woven into the rhythms of everyday life.<sup>3</sup> If there was ever a "borderlands" between gameplay and everyday life, ARGs thrive on perforating it.



**Figure 1.**An example of Ingress played out in Seattle, with the Enlightened and the Resistance battling for control of portals.<sup>4</sup>

For example, *Ingress* is framed as a battle for control over alien resources, known as XM (Exotic Matter). XM is the result of an invasion by a shadowy entity (the "Shaper") that wants to either control or enlighten humanity depending on which faction a player is aligned with (see Figure 1). Players join two ideologically diametric factions, either the "Enlightened" or the "Resistance," and battle for control of portals, literally acting as coordinated human antibodies that work to exploit the invasive matter while also regulating its presence. Players must coordinate with each other over large urban spaces to form geometric patterns that contain the XM; however, these hybrid geometric structures are constantly under threat from a group's rival faction. While the factions battle each other through controlling locations, they cooperate over social networks to solve the mystery of XM and the Shaper. Narrative gameplay unfolds through communications between a Google-backed company known as "Niantic," and players, known as "agents," who use a combination of a mobile devices with GPS capabilities and hints given by Niantic over Google+ to swarm and control physical locations by setting up "control fields" around XM portals. While XM portals technically exist through the mobile interface of *Ingress*, their virtual locations correspond to actual physical locations requiring players to be physically present to play. By controlling the spaces around these locational points, players are granted points that allow them to buy virtual equipment to aid them in-game, such as computer viruses to attack their opponents, or plot-related items such as hacked emails, pictures, and videos which aid in progressing the narrative.

<sup>&</sup>lt;sup>3</sup> ARGs regularly bring into question notions of personal identity, often requiring players to inhabit unfamiliar subject positions and physical spaces throughout the course of play (Taylor and Kolko 2003).

<sup>&</sup>lt;sup>4</sup> Source: <a href="http://en.wikipedia.org/wiki/Ingress\_(game">http://en.wikipedia.org/wiki/Ingress\_(game</a>)

The gamespace of *Ingress* thus overlays a fictionalized mobile interface onto the physical infrastructure of cities all around the world. In teams that range from one or two individuals to large groups consisting of hundreds of agents spread across the city, players use cell phones to track XM portals and triangulate with each other to form control fields, harvest resources and defend their resources from the rival faction. While this spatial battle is going on, Niantic slowly discloses the secrets behind XM over social networks in the form of riddles and documents. Clues about where and how to regulate the incoming invasion largely consist of hints, documents and player-generated reports that are distributed through Google+. Players, therefore, must communicate and micro-coordinate with their allies in order to collect resources and advance their standing within the community and the game. Ultimately, *Ingress* requires players to ward off invasions from their enemies by navigating online social environments and coordinating their physical movements with other members of their faction.

Ingress, therefore, thrives on monitoring pedestrian traffic and consumer behavior, which brings us to Ingress's most immediate commercial function: to gather capitalizable data about consumption habits. Thus while Ingress involves mechanics that are aimed at technology-aided navigation, it is also deeply entrenched in the logics of capital accumulation. For example, at this early stage of development Google is developing a profit model that is based on targeted advertisements and strategic portal locations (Hodson 2012; Kolb 2013). In short, Ingress is explicitly geared towards solving complex computational issues while also bolstering marketing apparatuses through the collection and processing of players' behavioral data. Because surveillance is embedded into its game mechanics, Ingress produces a community where everyday surveillant labor is normalized as a valid system of exchange. It is, in fact, the gift that players continuously give in return for the privilege of play.

One of the keys to Ingress's financial success—which is ultimately based in its surveillance success—is its integration of gaming and ubiquitous computing (ubicomp). As a number of scholars have pointed out, ubicomp is coming of age amid an ambivalent cultural milieu: although communication technologies are permeating all facets of life, they are becoming increasingly "invisible" and "ready to hand" (Dourish and Bell 2011). For example, popular applications like Foursquare use game mechanics to extend into the realm of everyday activities while also channeling a desire for conspicuous mobility (Wilson 2012). According to Matthew Wilson (2012), conspicuous mobility taps into cultural trends of personal exhibitionism while also linking mobile surveillance to the production of capital: location-based applications "allow users to 'check-in' at restaurants, bars, gyms, retail outlets, and offices, thereby sharing their location within their social network. These developments enable consumers to (re)discover their proximities to products, while feeding a desire for making known one's everyday movements" (2012: 1266).<sup>5</sup> These trends in conspicuous mobility, therefore, are highly reliant on the commercial, social, and physical architecture of urban life. Because of the compact nature of large urban centers, mobile advertising and location-aware applications are slowly being synchronized to the rhythms of urban living (Cronin 2006; Wilken and Sinclair 2009). Games like Ingress are becoming an important part of this restructuration, as they play an increasingly key role in the redirection of player mobility and the distribution of capital through urban space.<sup>6</sup>

Consequently, urban infrastructure is beginning to reflect the flow of information, rather than containing it (Brewer and Dourish 2008; Dourish and Bell 2007; Williams and Dourish 2006). The social-mobile gaming revenue from advertising alone was \$368 million in 2011 (Delo 2012) while mobile revenue hit \$1.78 billion in 2013 (Wall 2013). Data mining and micro-transactions are the defining characteristics of

<sup>&</sup>lt;sup>5</sup> Scholars tracking mobile communications and ubiquitous computing have noted a certain affinity between game mechanics and spatial practice in urban environments (de Souza e Silva and Hjorth 2009).

<sup>&</sup>lt;sup>6</sup> Large cities, in particular, provide a key insight into how the demands of ubicomp are being materialized in hybrid urban infrastructure (Dourish and Bell 2011). Mitchell (2003) argues that mobile, digital interfaces like *Ingress* act as extensions of perceptual and sensory systems that are integrated into the physical and virtual structures of city spaces. Similarly, pervasive mobile interfaces are implicit in framing navigation by feeding information into lived environments (de Souza e Silva 2006).

this capital production, as many of these games' business models are centered around generating profits from the emerging hybrid space economy. Marketers and business communicators have taken note of games' unique ability to increase engagement with a product, channel player traffic toward select businesses, and facilitate the tracking of customer use while providing increased consumer feedback (Zichermann and Linder 2010; Zuk 2012).<sup>7</sup>

By basing its business model on surrounding users in what Mark Andrejevic (2007) has called the "digital enclosure"—that is, by insinuating players' lives more deeply into digital technologies that track, capture, and recalibrate their everyday habits-Ingress is inherently bound to the mobile, lived sociality of its users. What is most unique and interesting about Ingress is that it not only tracks users' digital and physical encounters, it also captures their observations and communicative output, integrating them into their data collection project. Social media platforms combine with Google Glass to facilitate the mass processing of what users type, send, verbally record, and visually observe. Thus in order to remain functional and profitable, Ingress relies on diverse forms of player surveillance, including lateral surveillance—or peer-to-peer monitoring (Andrejevic 2006)—as well as the self-monitoring by which players record their own spatial, social, and/or biological feedback. To facilitate and formalize this massive surveillance of its playing subjects, Ingress has an end-user license agreements (EULAs) that requires user-data to be anonymously collected, opening the doors for players' own personal surveillance data to be harnessed by Google. While Google has been fairly open with its intent to monitor play, preliminary research shows that many players are often unaware of the true meaning of "terms and conditions" presented in game EULAs (Chee, Taylor and de Castell 2012).8 Regardless of player or community awareness, Google then uses the data "freely" given by players to adapt its surveillance mechanisms to social and locational feedback across vast, interconnected spatiotemporal matrices.

Given this basic and intensive capture of playing-subjects—by which the data of users' communicative output and mobility are recorded and capitalized by Google—a pressing question emerges: what is the nature of the exchange by which *Ingress* and other LBMGs entice users to sacrifice their living data for the privilege of play? In the remainder of this essay we will be less interested in *why* users sacrifice their privacy for gameplay—a controversial question that has been dealt with elsewhere (e.g., Andrejevic 2011)—than in the cultural and political significance of this exchange, particularly as it reflects the current state of reciprocity between watchers and the watched.

### Gifts of Surveillance

In recent months, this reciprocity has been frequently framed in terms of citizen security and massive state surveillance. In June 2013, *The Washington Post* and the Pew Research Center conducted a survey to evaluate Americans' willingness to submit to surveillance carried out by U.S. federal intelligence agencies. In the wake of the Edward Snowden affair, in which the CIA whistleblower publicly released

\_\_\_

<sup>&</sup>lt;sup>7</sup> Hybrid spaces, while exploiting location, are not "localized" in the traditional sense. They often paradoxically operate in the liminal spaces between hyper-local and global. Mobile interfaces and LBMGs, while including local spaces, also connect users with much larger networks (see Meyerowitz 2004). At the same time, data collected as players who engage with *Ingress* is both hyper-local and global, seeping across borders and boundaries while also containing and creating their own protocological enclosures (Galloway and Thacker 2007).

<sup>&</sup>lt;sup>8</sup> Relatedly, Google offers *Ingress* users an opportunity to identify with its own trendy ethos as a corporate entity: Google's public perception is largely positive, and the relationship between Google and its user community can be described as approaching a vigorous "fandom" (Vass 2007). Studies show that Google users often have a great deal of trust not only in Google's surveillance practices, but also in how Google arranges and uses the information it captures (Pan et al. 2007; Shaker 2006).

<sup>&</sup>lt;sup>9</sup> One simple answer is that, in the digital age, the social and technological enclosure through which *Ingress* and other LBMGs operate is widely accepted as necessary and beneficial. *Ingress* is a system of surveillance that touts creativity, ease of use, and connectivity on the surface while tacitly promoting the interests of corporations, advertisers, and governments through extensive data collection. Like most instantiations of hybrid space, the points of interface between bodies and data constitute an apparatus through which mobile applications sustain and feed the much larger networked space of the digital enclosure.

information about the National Security Administration's vast domestic and international surveillance program, a stark majority of the respondents reported that the federal government's first priority should be "investigat[ing] possible terrorist threats, even if that intrudes on personal privacy" (*Washington Post* 2013). Only 32 per cent of respondents, on the other hand, responded that state agencies should not "intrude on personal privacy, even if that limits its ability to investigate possible terrorist threats" (*Washington Post* 2013). A majority (56 per cent vs. 41 per cent) agreed that the NSA should be permitted to obtain secret court orders that allow them to monitor the phone records of "millions of Americans in an effort to investigate terrorism." The elusive gift of security, it seems, loomed large in the public's willingness to submit to invasive public surveillance regimes.

As the *Washington Post* article acknowledges, these numbers are not very surprising: they reflect a general public consensus that has been captured in each survey they have conducted since 2006. Yet as Torin Monahan has pointed out, these surveys reinscribe a facile public discourse of security, privacy, and citizen sacrifice: "Discourses about surveillance and security typically present false trade-offs, frequently between security and privacy" (Monahan 2010b: 10). According to Monahan, this discourse has a number of troubling implications: "This framing implies that surveillance works as promised, that people can make rational choices about adopting surveillance or exposing themselves to it, and that surveillance will not create new insecurities or problematic situations" (2010b: 10). Citizens thus enter a social contract of state surveillance—albeit one whose terms they little understand—based upon a number of assumptions about surveillance's efficacy in producing security (see Monahan 2010a).<sup>10</sup>

Thus, just as citizens have traded privacy for security in the public domain, they make similar exchanges in the private sector. Indeed, perhaps here the submission is most complex, as security ceases to be the primary currency of exchange. For example, consumers routinely exchange access to their personal data for a number of consumerist perks, including convenience, discounts, special offers, and recommendations (see Arvidsson 2004; Elmer 2004; Pridmore 2013; in brick and mortar stores, they use credit cards or discount cards which allow their purchases to be individually tracked and aggregated (Coll 2013; Pridmore 2013). And these data are used not only for consumer research, but also to generate customized advertisements and special promotions. It is a similar story, of course, online: browsing habits and consumer data converge to customize individual online experiences and to build aggregate knowledge (Reeves 2013). An increasing number of mobile applications, in fact, rely on the real-time transmission of geographical data in order to provide these affective and material advantages to users. As we pointed out earlier, *Foursquare*, for example, uses an online network to connect users in real-world spaces and link them up with discounts at nearby businesses; and LBMGs like *Ingress* process players' real-time spatiotemporal data in order to coordinate their gameplay across real and virtual space.

This integration has given rise to an evolving economy in which users exchange the data of their everyday lives for diverse forms of play and privilege. Leaving aside the question of these privileges' value—which, in the case of *Ingress*, means leaving aside whether the privilege of play provides an appropriate and equitable exchange for the rights to record and use one's personal data—we would like to interrogate the ultimately coercive nature of the digital enclosure. Consumers simply cannot shop online without using credit cards and submitting to the tracking of their purchases; they exchange this information for the ability to participate in the online economy. Similarly, drivers in numerous locales across the Canada, the U.S., and much of Western Europe cannot drive across town without being recorded by surveillance cameras (Klauser 2009; Packer 2008: 249–52; Webster 2009). Many urban pedestrians, by the same note, cannot wander far from their homes without being traced by street cameras, not to mention the wireless devices they carry in their pockets; they trade the data of their living movements for the privilege of

<sup>&</sup>lt;sup>10</sup> Similarly, the EULAs attached to games like *Ingress* often require data in return for play; however, the caveat is buried in dense legal text, suggesting that in many cases ludic surveillance is also a misrepresented dichotomy (Chee, Taylor and de Castell 2012). With the privilege of play comes a responsibility to submit.

leaving their houses. Thus, as an increasing proportion of our lives is spent bouncing around the rooms of the digital enclosure, we have witnessed the rise of a situation in which "those who do not submit to surveillance become obsolete" (Hill 2012: 116). The gift, in other words, is suspended obsolescence. Those who opt out get left behind.

Ingress, therefore, provides insight into how hybrid spaces are becoming the proving ground for experiments in compulsory digital enclosure. In exchange for the gift of play, users not only agree to the datafication of their everyday lives, but they also submit to an inundation of customized advertisements that aim to direct their consumptive behavior in real and virtual space. Speaking to the first concern, journalist Michael Carney argues that with Ingress, "Google has created an elaborate ruse to convince (possibly hundreds of) millions of people to share far more location and behavior data with the company than has ever been the case before" (Carney 2012). Of course, this is not a new element of Google's business strategy: as Carney puts it, "if there's one thing Google can't get enough of, it's data" (2012). With their search, email, and maps services, Google has been tracking consumer behavior for years, and they have been wildly successful in capitalizing that data. For example John Hanke, who runs the Google start-up Niantic that oversees *Ingress*'s operations, is excited about the new "monetization" opportunities opened up by the capture of hybrid space: "Part of Niantic's long-term goal includes figuring out how to best monetize the ubiquitous computing experience" (Chacos 2013). Describing the successes that *Ingress* has had in integrating advertising into hybrid space, Hanke says, "We've developed characters in conjunction with Zipcar and Jamba Juice that have made their way into the game, so some of the interactions affect gameplay, and others integrate the brands into the story" (Chacos 2013). While games like Ingress are designed to manipulate players' real-world physical movements, this aspect of hybridspace gameplay allows for players to be directed to a portal at Jamba Juice, Starbucks, or Burger King. This opens up the possibility for a banal infiltration of the game by corporate interests, as the game's portal structure—when combined with the profit structure described by Hanke—could easily call for thousands of players to descend on whatever businesses cough up the highest bid.

Along the same lines, *Ingress* opens the door for emerging forms of datafication and control by setting its sights on user mobility. Brad Chacos, a technology journalist at *PC World*, points out that *Ingress*'s "Field Trips," which call for users to enter specific physical spaces, open up the possibility for emergent forms of behavioral decoding: "the experimental, self-proclaimed 'ubiquitous' nature of Niantic's apps would theoretically be ideal suppliers for Google's vast data silos. The blend of GPS data and your physical reaction to Field Trip notifications could be a treasure trove for decoding behavioral trends" (Chacos 2013). In addition to contributing to Google's immense data troves, players also act as experimental subjects for new forms of consumption-oriented behavior modification. While Google has long been categorizing web consumers and tracking how they respond to various forms of advertising, they are now able to track—step-by-step—how advertisements affect subjects' movements into and between physical spaces. To Carney (2012), "This is why *Ingress* is so interesting, and potentially terrifying." <sup>11</sup>

Perhaps less "terrifying"—yet still essential to the *Ingress* project—are the ways in which *Ingress* facilitates lateral and self-surveillance. As we described earlier, the entire *Ingress* enterprise is premised on coordinated lateral surveillance—users watch and coordinate with their peers, as well as against their

<sup>&</sup>lt;sup>11</sup> Most *Ingress* users, however, don't seem to be very terrified. While drivers, pedestrians, and online consumers are more or less forced into electronic surveillance as a condition of survival in the digital era, *Ingress* is supplementary to these practices of mobility and consumption. *Ingress*, after all, is neither necessary nor exceptionally widespread; it remains something of a luxury. So while we can attribute *Ingress*'s growing popularity to an elusive "pleasurability," there are, of course, other factors involved. Among these is the game's status as an exclusive social practice. In a recent survey of 1,572 *Ingress* players, respondents reported that they had incurred costs in a number of predictable areas, such as transportation, new computing hardware, and upgraded data subscriptions. And because the game is so time-consuming and physically demanding, it appeals to a privileged demographic: liberal, middle-class Anglophone men (91 per cent male), the majority of whom are from the United States and Canada with notable contingents in Western Europe (*Simulacrum* 2013).

enemies, in order to take control of hybrid space. To play Ingress, then, is to participate in lateral surveillance as well as to make oneself available to others' monitoring. In fact, an essential element of the Ingress community is the process of self-archival and self-presentation that facilitates this peer-to-peer surveillance. Ben Medler (2011) points out that in most video games self-categorization and display are a vital part of the draw for engaging in gameplay (see Lupton 2013; Whitson 2013). For Medler, "player dossiers presents a player's past gameplay by using statistical and visualization methods while offering ways for players to connect to one another using online social networking features. . . . This turns the process of exploring past gameplay into its own reward beyond any awarded to a player in game" (2011: 1). Ingress allows players a large social networking forum to track and broadcast their play to the rest of the Ingress community. It also encourages players to accumulate and employ their collected data both in and out of the game in the form of an archive that grants a sort of personal historical narrative to the rewards and levels earned. In doing so, *Ingress* embeds self-surveillance into the game, encouraging players to organize and display their self-generated data. On the one hand, this opens up new streams of cheap and replicable data for Google to capture; on the other, Ingress's players are allowed to access and reorganize some of that data within the structures of archival and display offered by the game. This data, therefore, externalizes the player's digital persona, allowing him- or herself to become an object of selfproduction, self-surveillance, and self-reflection.

Given this centrality of surveillance to the *Ingress* project, watching and being watched solidify the social partnership between Google, the game, and the players. The fact that users enter into the exchange proposed by Ingress—and, by extension, that they submit to and actively encourage the pervasive surveillance of their mobility and communication—is a defining element of the digital culture of which Ingress is a single element. Perhaps more pressing, however, is how Ingress illustrates a broader recalibration of current social relations. In and outside of the video game world, pervasive datafication is becoming a necessary condition of digital sociability. As Andrejevic has observed, the digital enclosure provides diverse affective and financial perks to its subjects, "but only in exchange for willing submission to, among other conditions, the forms of monitoring and control facilitated by the interactive infrastructure" (2007: 311). In the case of *Ingress*, this exchange embeds surveillance and play into a system of mutual exchange between Google and its free, enthusiastic playing-subjects. Although users are not forced into this arrangement, they must submit to the rules of the exchange if they want the gift of play. Ingress thus provides the productive, motivating conditions under which users submit to Google's cool new method of pervasive datafication. By embedding surveillance into its game mechanics, *Ingress* gives rise to a "gaming culture" and a "gaming of culture" (see Boellstorff 2006) in which carrying out and submitting to diverse forms of surveillance is normal, necessary, addicting, and pleasurable.

### Ingress, Immunity, and the Gift that Keeps on Giving

In this essay we have outlined three types of surveillance that provide *Ingress*'s conditions of existence: top-down surveillance, through which Google captures the data produced by its players' actions; lateral surveillance, in which players monitor each other; and self-surveillance, in which players catalogue, display, and produce data about themselves. Each form of surveillance is central to the mission of *Ingress*, Google's ostensibly "free" gift to the gaming community. So in order to join the game, users must agree to return the gift via data production. The gift of surveillance, then, is multifaceted: Google offers the privilege of gameplay, whose condition of possibility is pervasive corporate surveillance; users reciprocate by submitting to Google's data-trawling operations as well as agreeing to carry out surveillance on their peers, their rivals, and themselves.

To shed more light on the nature of this surveillance-fueled exchange—and, by extension, the more general shift in the digital era's surveillance-based economy—we turn to Roberto Esposito's description of the *munus*, a gift that demands a return. For Esposito, the *munus* is a gift that demands reciprocal action. "Once one has accepted the *munus*," Esposito writes, then "one is obliged to return the onus, in the

form of either goods or services" (2007: xiii). *Munus* is a binding gift, a type of contractual potlatch, since it calls for a response from the receiver and thus embeds both parties in a recurrent and mandatory system of reciprocity. For Esposito, the *munus* is the mark of community, as this community will continue to circulate the binding contract among its members: in the words of Timothy Campbell, one of Esposito's leading advocates in North America, *munus* is "the gift that keeps on giving, a reciprocity in the giving of a gift that doesn't—indeed, cannot—belong to oneself" (2006: 4). Community is thus constructed around an "absent gift, one that members of a community cannot keep for themselves" (Campbell 2006: 4). For Esposito, this gift that keeps on giving is the defining mark of community: this contract of constant reciprocation binds members together, as they cannot simply take the gift and walk away. As Campbell puts it, "accepting the *munus* directly undermines the capacity of the individual to identify himself or herself as such and not as part of the community" (2006: 4). From this perspective, community is incompatible with relations of private property and the values of insatiable capitalist accumulation.

In the most basic sense, the Ingress "community" is bound to a sort of gift economy: players are bound to the game, bound to other players, and bound to Google in a cycle of reciprocation (via game participation and compulsory data production). Yet Esposito has made the crucial observation that, in order for community to exist, there must also be immunity. Immunity, for Esposito (2007, 2011), is freedom from having to reciprocate the munus. Anyone who has been contractually freed from reciprocity is also freed from communal obligations. This immune subject thus enjoys a permanent state of communal exception, an individual autonomy that allows him or her to cease dispensation or reciprocation at will. The privileges of immunity, therefore, sever one from the community by empowering the immune subject to subvert its constitutive logics of reciprocity. Google enjoys this immune status because, in the case of *Ingress*, it is the sole contract holder and the primary beneficiary of players' participation. *Ingress* is Google's world players are simply renting it with their datafied bodies. Google extracts Ingress users' personal data in order to transplant it into unaccountable relations of capital production that are external to the game's social community. Ingress's data capture infrastructure, therefore, is not simply aimed at sustaining the community—rather, the Ingress community's raison d'être is to facilitate the production, extraction, and recirculation of users' personal data. Because the mechanical substrate and animating substance of *Ingress* is pervasive surveillance, players must build and support the community by submitting to and actively participating in multiple forms of surveillance. However, because of its immune status vis-à-vis the *Ingress* community, Google is empowered with the exceptional privilege to extract players' communal contributions from the cycle of reciprocal exchange. Once released from this system of communal reciprocity, the *Ingress* community's gifts are monetized, generating capital that becomes the exclusive purview of Google.

Accordingly, *Ingress* is not really a "gift" at all in the community-affirming sense described by Esposito. As Esposito, Georges Bataille (1991), and Marcel Mauss have argued, a true gift calls for the renunciation of private property rather than the accumulation and hoarding of capital. For Mauss (2000), gifts are about denying or subverting the capitalist exchange system rather than reinforcing it. With *Ingress*, Google is offering a gift that defies this communal ideal. When users play *Ingress*, they enter a group whose internal conditions demand they reciprocate by carrying out and submitting to data-generating surveillance. However, this community's existence is predicated on the immunity that allows Google to contradict this system of reciprocation by removing users' data from the immanent cycle of gift-giving.

### Conclusion

To conclude, we should emphasize that our critique is not intended to build a normative definition of community and then excoriate Google for not living up to it. However, we do think that Esposito's notions of community—as well as its violation—provides useful insights into how the crisis of digital capitalism has led to forms of accumulation that, despite their rhetoric of participation and empowerment, thrive on the production, maintenance, and exploitation of energetic digital "communities." *Ingress* and other

LBMGs thus provide new media for deploying old tricks: unabashed corporate surveillance is smuggled into seductive forms of participatory play (see Dyer-Witheford and De Peuter 2009: 3–34).

As more of our lives are plugged into the circuits of Google, Facebook, and the other kings of digital capital, the terms of our social compact are being revised. *Ingress*, therefore, signals a problem that extends beyond the world of gaming, a problem that is characterized by the fact that citizens are being called on to submit to (and even carry out) surveillance in order to carry out everyday existence (see Reeves 2012). While *Ingress* players willingly submit to pervasive datafication, this exchange hints that more serious problems will emerge down the road: we have little reason to doubt that this economy of compulsory surveillance will spread to the extent that it ceases to be an equitable or even rational or conscious exchange, but instead becomes the only way to access goods, build and maintain social relationships, and participate in politics. As an early experiment in the compulsory digital enclosure, *Ingress* gives us a glimpse into a future whose outlines we can already clearly see—one in which pervasive surveillance is the condition of sociality, and where zones of immunity provide shelter to those who reign beyond the periphery of our little communities.

#### References

- Andrejevic, Mark. 2006. The Discipline of Watching: Detection, Risk, and Lateral Surveillance. *Critical Studies in Media Communication* 23(5): 391–407.
- —. 2007. Surveillance in the Digital Enclosure. *The Communication Review* 10(4): 295–317.
- Arvidsson, Adam. 2004. On the 'Pre-History of the Panoptic Sort': Mobility in Market Research. Surveillance & Society 1 (4): 456-74.
- Bataille, Georges. 1991. *The Accursed Share: An Essay on General Economy, Vol. 1: Consumption.* Cambridge: Zone Books. Brewer, Johanna and Paul Dourish. 2008. Storied Spaces: Cultural Accounts of Mobility, Technology, and Environmental Knowing. *International Journal of Human—Computer Studies* 66(12): 963–976.
- Campbell, Timothy C. 2006. Bios, Immunity, Life: The Thought of Roberto Esposito. Diacritics 36(2): 2-22.
- Carney, Michael. 2012. Google's Ingress is more than a game, it's a potential data exploitation disaster. *PandoDaily.com*. Accessed August 30, 2013. <a href="http://pandodaily.com/2012/11/19/googles-ingress-is-more-than-a-game-its-a-potential-data-exploitation-disaster/">http://pandodaily.com/2012/11/19/googles-ingress-is-more-than-a-game-its-a-potential-data-exploitation-disaster/</a>
- Chacos, Brad. 2013. Deep inside Ingress, the Google-made game that's paving the way for glass. *Techhive*. Accessed August 29, 2013. <a href="http://www.techhive.com/article/2040760/deep-inside-ingress-the-google-made-game-thats-paving-the-way-for-glass.html">http://www.techhive.com/article/2040760/deep-inside-ingress-the-google-made-game-thats-paving-the-way-for-glass.html</a>
- Chan, Dean. 2008. Convergence, Connectivity, and the Case of Japanese Mobile Gaming. *Games and Culture* 3(1): 13–25. Chee, Florence M., Nick Taylor and Suzanne de Castell. 2012. Re-Mediating Research Ethics: End-User License Agreements in Online Games. *Bulletin of Science, Technology and Society* 32(6): 497-506.
- Coll, Sami. 2013. Consumption as Biopower: Governing Bodies with Loyalty Cards. *Journal of Consumer Culture* 13(3): 201-20. Cronin, Anne M. 2006. Advertising and the Metabolism of the City: Urban Space, Commodity Rhythm. *Environment and Planning: Society and Space* 24: 615–632.
- de Souza e Silva, Adriana. 2006. From Cyber to Hybrid: Mobile Technologies as Interfaces of Hybrid Spaces. *Space and Culture* 9(3): 261–278.
- ——. 2008. Hybrid Reality and Location-Based Gaming: Redefining Mobility and Game Spaces in Urban Environments. Simulation & Gaming 40(3): 404–424.
- de Souza e Silva, Adriana and Jordan Frith. 2011. Locative Mobile Social Networks: Mapping Communication and Location in Urban Spaces. *Mobilities* 5(4): 485–505.
- ——. 2011. Mobile interfaces in Public Spaces: Locational Privacy, Control, and Urban Sociability. New York: Routledge. de Souza e Silva, Adriana and Larissa Hjorth. 2009. Playful Urban Spaces: A Historical Approach to Mobile Games. Simulation & Gaming 40(5): 602–625.
- Delo, Cotton. 2012. What is Gamification, and How Can I make it Useful for My Brand? *Advertising Age* 83(9): 58.
- Deterding, Sebastian, Dan Dixon, Rilla Khaled, and Lennart Nacke. 2011. From Game Design Elements to Gamefulness: Defining Gamification. In *Mindtrek 2011 Proceedings*, 9-15. Tampere: ACM Press.
- Dourish, Paul and Genevieve Bell. 2007. The Infrastructure of Experience and the Experience of Infrastructure: Meaning and Structure in Everyday Encounters with Space. *Environment and Planning B: Planning and Design* 34(3): 414–430.
- Dourish, Paul and Genevieve Bell. 2011. Divining a Digital Future: Mess and Mythology in Ubiquitous Computing. Cambridge, MA: MIT Press.
- Dyer-Witheford, Nick and Greg de Peuter. 2009. *Games of Empire: Global Capitalism and Video Games*. Minneapolis: University of Minnesota Press.
- Elmer, Greg. 2004. Profiling Machines: Mapping the Personal Information Economy. Cambridge, MA: MIT Press.

- Esposito, Roberto. 2011. Immunitas: The Protection and Negation of Life. Trans. TimothyCampbell. Cambridge: Polity.
- —. 2007. Bios: Biopolitics and Philosophy. Trans. Timothy Campbell. Minneapolis: University of Minnesota Press.
- Galloway, Alexander and Eugene Thacker. 2007. *The Exploit: A Theory of Networks*. Minneapolis: University of Minnesota Press.
- Gazzard, Alison. 2011. Location, Location: Collecting Space and Place in Mobile Media. *Convergence: The International Journal of Research into New Media Technologies* 17(4): 405–417.
- Gordon, Eli and Adriana de Souza e Silva. 2010. Net Locality: Why Location Matters in a Networked World. Malden, MA: Wiley-Blackwell.
- Hill, David W. 2012. Jean-Francois Lyotard and the Inhumanity of Internet Surveillance. In *Internet and Surveillance: The Challenges of Web 2.0 and Social Media*, eds Christian Fuchs, Kees Boersma, Anders Albrechtslund, and Marisol Sandoval. New York: Routledge.
- Hindman, Beau. 2013. MMObility: Google's Ingress shines light on the good and bad of ARGs. Retrieved June 15, 2013 from <a href="http://massively.joystiq.com/2013/03/08/mmobility-googles-ingress-shines-light-on-the-good-and-bad-of/">http://massively.joystiq.com/2013/03/08/mmobility-googles-ingress-shines-light-on-the-good-and-bad-of/</a>
- Hodson, Hal. 2012. Why Google's Ingress game is a data gold mine. Retrieved June 15, 2013 from <a href="http://www.newscientist.com/article/mg21628936.200-why-googles-ingress-game-is-a-data-gold-mine.html">http://www.newscientist.com/article/mg21628936.200-why-googles-ingress-game-is-a-data-gold-mine.html</a>
- Klauser, Francisco R. 2009. 'Lost' French CCTV Studies. Surveillance & Society 6(1): 23-31.
- Kolb, Jeremy. 2013. The Hidden Side of Ingress. Retrieved June 15, 2013 from <a href="http://www.applieddatalabs.com/content/hidden-side-ingress">http://www.applieddatalabs.com/content/hidden-side-ingress</a>
- Lefebvre, Henri. 1991. The Production of Space. Trans. Donald Nicholson-Smith. Malden, MA: Blackwell-Wiley.
- Licoppe, Christian. 2009. Recognizing Mutual 'Proximity' at a Distance: Weaving Together Mobility, Sociality and Technology. *Journal of Pragmatics* 41(10): 1924–1937.
- Lupton, Deborah. 2013. Understanding the Human Machine. IEEE Technology and Society Magazine 32(4): 25-30.
- Lycett, Mark. 2013. 'Datafication': Making Sense of (Big) Data in a Complex World. *European Journal of Information Systems* 22(4): 381–6.
- Manovich, Lev. 2006. The Poetics of Augmented Space. Visual Communication 5(2): 219-40.
- Mauss, Marcel. 2000. The Gift: The Form and Reason for Exchange in Archaic Societies. New York: W.W. Norton & Co.
- Meyerowitz, Joshua. 2004. The Rise of Glocality: New Senses of Place and Identity in the Global Village. In *The Global and the Local in Mobile Communication*, ed. K. Nyíri. Vienna: Passagen Verlag.
- Medler, Ben. 2011. Player Dossiers: Analyzing Gameplay Data as a Reward. Game Studies 11(1): [Online].
- Mitchell, William J. 2003. Me++: The Cyborg Self And The Networked City. Cambridge: MIT Press.
- Monahan, Torin. 2010a. Surveillance as Governance: Social Inequality and the Pursuit of Democratic Surveillance. In *Surveillance and Democracy*, eds Kevin D. Haggerty and Minas Samatas, 91 –100. Routledge: New York.
- Montola, Markus, JaakkoStenros, and Annika Waern. 2009. *Pervasive Games: Experiences on the Boundary Between Life and Play*. Burlington: Morgan Kaufman Publishers.
- Nippert-Eng, Christena. 2005. Boundary Play. Space and Culture 8(3): 302-324.
- Packer, Jeremy. 2008. Mobility without Mayhem: Safety, Cars, and Citizenship. Durham, NC: Duke University Press.
- Pan, Bing, Helene Hembrooke, Thorsten Joachims, Lori Lorigo, Geri Gay, and Laura Granka. 2007. In Google We Trust: Users' Decisions on Rank, Position, and Relevance. *Journal of Computer-Mediated Communication* 12(3): 801-823.
- Pridmore, Jason. 2013. Collaborative Surveillance: Configuring Contemporary Marketing Practice. In *The Surveillance-Industrial Complex: A Political Economy of Surveillance*, eds Kirstie S. Ball and Laureen Snider, 107-121. New York: Routledge.
- Reeves, Joshua. 2013. Temptation and its Discontents: Digital Rhetoric, Flow, and the Possible. *Rhetoric Review* 32(3): 314–30.
- ——. 2012. If You See Something, Say Something: Lateral Surveillance and the Uses of Responsibility. *Surveillance & Society* 10 (3/4): 235–48.
- Shaker, Lee. 2006. In Google We Trust: Information Integrity in the Digital Age. *First Monday* 11(4) <a href="http://firstmonday.org/ojs/index.php/fm/article/view/1320/1240">http://firstmonday.org/ojs/index.php/fm/article/view/1320/1240</a>
- Simon, Bart. 2006. Beyond Cyberspatial Flaneurie: On the Analytic Potential of Living With Digital Games. *Games and Culture* 1(1): 62-67.
- Simulacrum. 2013. The Demographics of Ingress.Retrieved May 21, 2014. <a href="http://simulacrum.cc/2013/01/23/the-demographics-of-ingress/">http://simulacrum.cc/2013/01/23/the-demographics-of-ingress/</a>
- Starr, Michelle. 2012. When AR gaming makes you look like a criminal. Retrieved July 2, 2013, from <a href="http://www.cnet.com.au/when-ar-gaming-makes-you-look-like-a-criminal-339342785.htm">http://www.cnet.com.au/when-ar-gaming-makes-you-look-like-a-criminal-339342785.htm</a>
- Stenros, Jaakko, Annika Waern, and Markus Montola. 2012. Studying the Elusive Experience in Pervasive Games. *Simulation & Gaming* 43(3): 339-355.
- Taylor, T. L and Beth Kolko. 2003. Boundary Spaces: Majestic and the Uncertain Status of Knowledge, Community and Self in a Digital Age. *Information, Communication & Society* 6(4): 497-522.
- Vass, Lisa. 2007. Is It OK that Google Owns Us? Retrieved July 18, 2013, from <a href="http://www.eweek.com/c/a/Security/Is-It-OK-that-Google-Owns-Us/">http://www.eweek.com/c/a/Security/Is-It-OK-that-Google-Owns-Us/</a>
- Wall, Michael. 2013. US Mobile Gaming Revenues hit \$1.78 billion in 2013.Retrieved September 3, 2013 from <a href="http://www.brighthand.com/default.asp?newsID=20161&news=us\_mobile\_gaming\_revnues\_hit\_\$1.78\_billion\_in\_2013">http://www.brighthand.com/default.asp?newsID=20161&news=us\_mobile\_gaming\_revnues\_hit\_\$1.78\_billion\_in\_2013</a>
- Washington Post. 2013. Majority say NSA tracking of phone records 'acceptable'—Washington Post-Pew Center poll. WashingtonPost.com. June 10, 2013. Accessed August 30, 2013.

http://www.washingtonpost.com/politics/polling/majority-say-nsa-tracking-phone-records/2013/06/10/96049508-d20c-11e2-9577-df9f1c3348f5 page.html

- Webster, C. William. 2009. CCTV Policy in the UK: Reconsidering the Evidence Base. Surveillance & Society 6(1): 10-22.
- Whitson, Jennifer. 2013. Gaming the Quantified Self. Surveillance & Society 11(1-2): 163-76.
- Wilken, Rowan and John Sinclair. 2009. 'Waiting for the Kiss of Life': Mobile Media and Advertising. Convergence: The International Journal of Research into New Media Technologies 15(4): 427-445.
- Williams, Amanda and Paul Dourish. 2006. Imagining the City: The Cultural Dimensions of Urban Computing. *Computer* 39(9): 38–43
- Wilson, Matthew W. 2012. Location-based Services, Conspicuous Mobility, and the Location-aware Future. *Geoforum* 43(6): 1266-1275.
- Zichermann, Gabe and Joselin Linder. 2010. Game-based Marketing: Inspire Customer Loyalty Through Rewards, Challenges and Contests. New Jersey: Wiley.
- Zuk, Ryan. 2012. Get in the Game: How Communicators can Leverage Gamification. Public Relations Tactics 19(2): 7.