# Along the Lines of the Occupation Playing at Diminished Reality in East Jerusalem

## Fabio Cristiano and Emilio Distretti

**ABSTRACT:** Augmented reality enables video game experiences that are increasingly immersive. For its focus on walking and exploration, Niantic's location-based video game *Pokémon Go* (PG) has been praised for allowing players to foster their understanding and relationship to surrounding spaces. However, in contexts where space and movement are objects of conflicting narratives and restrictive policies on mobility, playing relies on the creation of partial imaginaries and limits to the exploratory experience. Departing from avant-garde conceptualizations of walking, this article explores the imaginary that PG creates in occupied East Jerusalem. Based on observations collected in various gaming sessions along the Green Line, it analyzes how PG's virtual representation of Jerusalem legitimizes a status quo of separation and segregation. In so doing, this article argues that, instead of enabling an experience of augmented reality for its users, playing PG in East Jerusalem produces a *diminished* one.

KEYWORDS: augmented reality, line, Palestine, Pokémon Go, space, video game, void, walking

The application of augmented reality (AR) technologies to gaming purports to create playable experiences at the intersection of real and virtual worlds. Adding a virtual layer onto the actual world enables experiences that exceed the boundaries of both worlds through the creation of hyperrealities. Besides being of interest to ontological debates pertaining to the real-virtual divide and its simulations, integrating features of different worlds results in the creation of scenarios in which actual spaces, politics, and narratives are assembled and reproduced in rarified ways, often in contrast to the complexities on the ground. Particularly in the context of disputed areas, overlaying a virtual world over a disputed space remains a problematic endeavor: as augmented realities consist of hybrids created through embedment, they depend primarily on how actual layers of space are transposed into virtual settings. This transposition occurs by seizing complexities and making them fit into the finite world of a game. In this sense, some characteristics of the actual world need to be singled out before the addition of a virtual layer in the construction (Milgram and Kishino 1994). At the same time, this reduction necessarily builds on specific and selective understandings of reality, where spaces—and imaginaries surrounding these spaces—are diluted into an assembled outcome. Spaces are, however, not neutral (Lefebvre 1991), and a transposition of an actual space into a virtual setting conveys meaning on the particular imaginary underlying that construction.

In the context of Palestine-Israel, space remains an object of concern and the medium through which military, civil, and judicial powers operate. Specifically, Sari Hanafi (2006, 2012)

Conflict and Society: Advances in Research 3 (2017): 130–143 © Berghahn Books doi:10.3167/arcs.2017.030111



defines the erasure of Palestinian national space (e.g., properties, land, villages, and private houses) during and following the 1948 Nakba as "spacio-cide." Space also channels conflicting narratives in the production of imaginaries and their virtual representations. In a context where narratives, politics, and activism are framed around different understandings of space, AR gaming creates experiences that are necessarily embedded into these contrasting narratives. As soon as Niantic's walkable AR game *Pokémon Go* (PG)<sup>1</sup> became available in Palestine-Israel, these narratives were used to frame the game within their realities. Palestinians in Gaza and the West Bank highlighted the difficulties of playing because of a poor mobile data connection and forced reduced mobility in the occupied territory.<sup>2</sup> Before the Israeli Defense Forces' (IDF) Security Division issued a ban, Israeli soldiers posted pictures on Twitter associating Pokémon with terrorists and therefore deserving to be caught. Meanwhile, the Israeli president jokingly called security when a Meowth, a feline Pokémon, invaded the AR space of his office. In the context of Palestine-Israel, popular cultural phenomena often become embedded within opposing narratives, especially in the city of Jerusalem.

Besides becoming an object of these story lines, PG also produces its own virtual representation of the city. The resulting AR space consists of a set of lines that players must walk in order to catch and collect different Pokémon, the fictional creatures created by Satoshi Tajiri in 1995. These lines retrace actual streets or paths and, deferring those elements that characterize the city as divided, create the image of a united city, standing as one.

Following the 1967 Six-Day War and the annexation of East Jerusalem, Israel has constantly depicted the image of a similarly united Jerusalem, which until today—despite all its contradictions—remains the ultimate expression of a long-lasting dichotomy between Zionist narrative and the reality on the ground. Under the United Nations (UN) Partition Plan of 1947, which divided Mandatory Palestine between a Jewish state and an Arab state, Jerusalem was determined as an international zone belonging to neither state. In the aftermath of the 1948 Arab-Israeli War, the city was divided between Israel (West) and Jordan (East). Jerusalem remained divided up until its so-called unification under Israeli rule in the immediate aftermath of the 1967 war. (Israel also occupied the rest of Mandatory Palestine as well as Egypt's Sinai and Syria's Golan Heights.)

However, the act of annexation—and the subsequent expansion of the municipal boundaries of the city—failed to bridge the divide, which remains today and continues to be, paradoxically, reinforced by municipal, economic, infrastructural, and military policies and realities. While the metropolitan area of Jerusalem develops as a matrix of encroaching settlements, construction, and expansion, the Palestinian side is left under strict planning regulations preventing its growth. Looking at the complexities of a divided Jerusalem, this article argues that PG loses its innocence in the very moment that the act of playing becomes one of preserving the status quo, built according to and through the lines of separation imposed by Israel's order, and the Zionist creation of an indivisible Jerusalem.

PG's gameplay consists of actual walking, then virtualized onto the AR map. For this reason, the game has been widely praised for enabling a healthy game experience that encourages players to explore "the world out there." In this explorative spirit, we took a *dérive*, playing and aimlessly walking to understand how the game's AR embeds and reproduces the complex realities of segregation in East Jerusalem. Our walks went along and through the 1949 Armistice Line (also known as the Green Line) that marked the border of Israel until the 1967 war when, in its aftermath, Israel occupied Palestinian-inhabited territories east of the line. More specifically, our *dérive* consisted of several walking sessions: starting in Sheikh Jarrah (East Jerusalem), we moved along the Green Line and randomly deviated from our path following the lines created by the game.<sup>3</sup> Confining walking to this specific area—along the Green Line on the north-south

axis of the city—we intended to engage with the performativity of a border that, from 1949 until today, has been made invisible by Israeli authorities, policies, and mainstream narratives (Gordon 2008).

As a spatial practice that leaves more or less visible lines behind, walking contains an epistemic value that appears crucial for revealing and understanding the substrate of reality. In the case of PG, walking in fact represents both the game's realization and our fundamental method of inquiry. More specifically, since our focus rests on East Jerusalem as the spatial product of AR, this article conceives of walking as a subjective practice (Middleton 2009) allowing researchers to develop a spatial and local knowledge about the urban surrounding, its constitutive elements, and ultimately stimulate awareness around questions of (the right to) mobility and positionality (race, gender, and class) within complex geopolitical settings.<sup>4</sup> For these reasons, while our *dérive* is, indeed, observational and instrumental to coordinating and "making explicit the relationship among data, analysis, findings" (Pierce and Lawhon 2015: 659), it differs from those traditional ethnographic approaches to walking that combine movement to traditional fieldwork in order to "become aware of the key routines, habits and practices through which people inscribe their knowledges into places" (Anderson 2004: 257).

With the aim of revealing the infrastructural grid produced by the intersection between the virtual and the real in AR technologies, our analysis starts by introducing *walking* as both the object (the essence of the game itself) and the method of our inquiry (as qualitative fieldwork). The article then concentrates on two visual elements of the game: (1) the *line*, as the geometrical object that, being instrumental to the creation of urban space, informs and describes the game reality, as well as Jerusalem's grid of borders, fences, roads, checkpoints, and settlements; and (2) the *void*, the image that, embodying the detachment between real and virtual in the game's realization, consequently erases the traces of the occupation from its visual representation.

### Walking

For its revelatory potential, walking has been long instrumental in the reproduction of conflicting narratives within the Palestine-Israel context. In his *Sacred Landscape*, Meron Benvenisti (2000: 232) argues that it was through the practice of hiking (as a form of place making) that Zionism forged the sense of Jewish proprietorship over the land. Similarly, Palestinian writer Raja Shehadeh (2008) has shown the epistemic value of walking in his study of the Palestinian "vanishing landscape." His *sarha* (walking/roaming) across the hills and *wadis* of Palestine describes a process of memory cultivation and learning about Palestinian history despite the encroaching transformations (checkpoints, settlements, fences) produced by Israeli colonization.

As much as walking connects people to places and their historical narratives, it also possesses a disruptive potential: creating alternative stories and places.<sup>5</sup> Often considered an act of place making, walking has always stimulated art and creativity as a way to challenge the spatial order of the city. Every step becomes a signifying gesture, a way to rediscover repressed memories while creating alternative paths of mobility through the alteration of preconstituted routes. In fact, in the Situationist tradition, walking comes to be theorized and practiced through its potential to challenge the order of cities while creating alternative urban experiences, realities, and imaginaries on its own terms. In this spirit, Guy Debord (2008) theorized walking as the practice that breaks prefixed trajectories and creates meaning by disrupting the linearity of life and space. Deviating from prefixed trajectories, walking serves as a tool for imagining, learning, reinterpreting, and reappropriating urban and nonurban spaces. Avant-garde movements (1940s–1970s), such as Lettrism and then Situationism, refer to disruptive and undisciplined walking as *dérive*, an aesthetic practice that should realize a new revolutionary way of being, moving, and living the city against the bourgeois prism of order and discipline. Walking generates moments of revelation, situations resulting from unplanned and occasional experiences. Michel de Certeau has famously celebrated those "daily practitioners of the city walk" who, escaping the panoptic eye, "live down below, below the thresholds at which visibility begins" and so "make use of spaces that cannot be seen, network of moving with no authors" (1988: 93). As a way to contest the dogma of mobility in terms of linearity, Certeau narrates the nomadic and migrational city, where *flânerie* and the art of passing by are the premises to realize "the spatiality of the viewer" (Cosgrove 1999: 7) and the appropriation of the city from below.

This disruptive element of walking only recently became incorporated into video gaming. In classical video gaming (1960s–1990s), movement—particularly walking—relies on a prescriptive understanding of mobility and space that, through its linear and two-dimensional paths, appears unchangeable (Donovan 2010). Framing the play along precise directions only allows players to make very few choices, leading to limited mobility: slavishly walking a disciplined and linear path, players eventually succeed in completing a specific task or mission. In other words, whereas following lines leads to progress, disrupting them signifies defeat.

In these setups, gamers must follow unidirectional lines (with often no opportunity of going back) and make sure to find themselves in expected situations: making correct decisions and actions enables moving onto the next situation, usually associated with harder challenges (Baer 2005; Kent 2001). Mainly because of technological limitations, this linearity (spatial as well as temporal) would often characterize the game's movement as proceeding from left to right, or from the bottom and upward. In order to adhere to a discourse equating better video games to more realistic ones, newer games (since the 2000s)-thanks to advancements in technologyfocused on improving graphics and playability to create virtual experiences that seem more consistent with those of the real world (Galloway 2006; Tavinor 2009). In this context, movement changes and abandons straightforward lines. Players can choose to move in three dimensions, back and forth, and without necessarily visiting virtual places in a prescribed and consequential order (Salen and Zimmerman 2004). Walking somewhat abandoned straight lines, and despite the finiteness of possible actions, players could walk aimlessly and find their virtual selves in somewhat unplanned situations-while neglecting the consequentiality of the play (Cremin 2015; Newman 2008). Whereas lines were the limits of reality and technological progress, disrupting them was seen as the key to progress and increased realism.

In the spirit of creating game experiences with closer approximation to reality, many recent video games incorporate AR techniques into the play. For mobility, this implies to merge actual movement with its virtualized abstraction in different ways and degrees (Graham et al. 2012). Players perform actions in the real world, such as walking, in order to complete different game tasks. For enabling the social dimension of walking, these games are often praised for enhancing people's mobility in the city and creating new forms of sociality grounded in gaming (such as meeting real-life fellow gamers along the way). Players are encouraged to connect, spend time together, and explore their surroundings. In fact, through the creation of a common virtual imaginary, (more or less disciplined) walking constitutes a goal in its own right, beyond the logics of the game itself. In East Jerusalem, however, walking remains heavily disciplined through those polymorphous technologies of control that materialize Israeli infrastructural power and occupation, de facto hindering the intrinsic sociality of walking.

We begin our PokéWalk (the essential feature of the game) in Sheikh Jarrah, a Palestinian neighborhood in East Jerusalem, on the slopes of Mount Scopus, and plan to proceed along the Green Line. Walking toward Damascus Gate, in the proximity of a number of properties at constant risk of expropriation (such as Karm al-Mufn and the Ma'muniya school), we familiarize ourselves with the newly installed game app. Despite the main roads of the neighborhood appearing fully traced on the PG map, very few PokéStops are at a visible distance. These are virtual landmarks created on the map and identifiable with a blue box icon. Corresponding to actual points of interest (such as public spaces, monuments, parks, and so on), they must be accessed for collecting tools (such as PokéBalls and eggs) that enable players to catch and train Pokémon.<sup>6</sup> As these are missing in our immediate surroundings, we take a detour in the direction of the Mount of Olives toward the Hebrew University campus on Mount Scopus (where the map indicates that some PokéStops are available). Continuing our walk, deep into the Palestinian side of the Green Line, we leave the Israeli Ministry of Housing and Construction on our left, and we proceed toward the university's road juncture, where we access two PokéStops for the first time; here, we collect game items.

At first glance, it becomes clear how PokéStops remain the only territorial landmarks made available by the game, defining through naming a correspondence between the virtual map and the actual one. As much as the appearance of Pokémon is randomized along the lines—allowing for some degree of aimless but linear walking—virtual landmarks discipline the experience of walking and the player's trajectory (thus posing limits to the experience of *dérive*). Using the Green Line (not traced on the AR map) as our invisible polar star for orientation, we observe how the uneven distribution of PokéStops and gyms<sup>7</sup> between East and West Jerusalem reproduces the uneven geography of the city. At the same time, PG's aesthetics do not simply offer the visualization of the status quo through the existing divisions and disparity between the Israeli and Palestinian sides of the city. On the contrary, the game's images seem to perform an active role in reinforcing the existing uneven regime of mobility affecting the Palestinian residents of East Jerusalem.

As we continue our PokéWalk, moving across Wadi al-Joz (north of the Old City), with its main streets seemingly fully traced on the virtual map (but with the complete absence of PokéStops), we proceed along Nablus Road toward nearby PokéStops in the direction of the Old City. Walking on this path, the AR map indicates nearby hotels—the American Colony, the Grand Court, the Legacy, and so on—as the only identifiable landmarks. Despite this omission, however, Palestinian points of interest abound in the immediate area. Similarly, proceeding further along Salah el-Din Street, a number of PokéStops appear on our path: the Israeli Department of Justice, the District Court, and a war memorial dedicated to IDF paratroopers killed in the 1967 war. As much as Palestine seems to vanish at the intersection between reality and its added virtual layer, PokéStops attract walking in the direction of international touristic hotspots or outposts and symbols of the Israeli occupation.

Once at the end of Salah el-Din Street (the heart of the Palestinian market facing Herod's Gate, one of the entrances to the Old City), a large number of Pokémon suddenly appear in the nearby virtual surroundings. In contrast to the very few that had crossed our path in the previous zigzags across the Green Line in East Jerusalem, now we are able to catch a dozen in the span of few meters.<sup>8</sup> This surprising sudden change can be explained because of our proximity to the Old City and the large traffic of people in the area. Users have reported that wild Pokémon spawn rates depend on the population density in a specific area and its traffic, which is calculated through the number of mobile connections to data services.

Approaching the Old City, we stand at the amphitheater at the entrance of Damascus Gate (in Arabic, Bab al-'Amud). Considered historically the commercial gate opening the doors to the Old City's market, the square crawls with rushing Palestinian residents, retailers, bystanders, and tourists on the move. Perhaps the most significant public space in East Jerusalem, the military control imposed by Israel has progressively transformed this space of commonality into a military asset for controlling the in-and-out stream of Palestinians. Although Richard Sennett contends that the square should function as a space of "urban democracy" (1998: 40), today's Damascus Gate area (just off the Green Line) has progressively lost its publicness and turned into an area of quick transit, where residents can hardly stop by or sit on the steps of the square, as they face the risk of being questioned and harassed by the military patrolling the area (Pullan et al. 2007). Along the same lines, the area around Damascus Gate stays empty in the AR of our smartphone's screen.

Standing on top of the roundabout in front of Damascus Gate, a few steps away from the Green Line, we can overlook the Old City—and its virtual representation—in entirety: while major ways seem to be traced on the map, vast parts of the dense network of minor streets and passages that characterize the walled area are missing. Just across the virtual-empty gate, a large number of PokéStops pop up and attract our walking within the walls of the Old City. Their spatial arrangement reproduces the traditional division of the Old City into four quarters: Muslim, Christian, Armenian, and Jewish. Condensed around the areas with major touristic attractions, their disposition clearly depicts different areas as being somehow separated, standing on their own and unevenly visible. Most stations along the Via Dolorosa are virtually abstracted as PokéStops, allowing players to take a sort of AR pilgrimage to Calvary. In the same area, other stops—such as the Church of the Holy Sepulcher, the Church of Saint John the Baptist, the Greek Orthodox Patriarchate, and the New Gate (along the Old City wall)—create a detailed representation of the Christian quarter on the map. Not too far away, several stops create a similarly detailed virtual presence of the Armenian and Jewish quarters, while, by contrast, there is no landmark on the virtual map to signal the Muslim quarter.

The AR map abstracts space in partial ways, and subordinates the experience of walking to its spatial representations. Nameless virtual lines retrace only principal roads, channeling walking toward and along main areas. In the same way, PokéStops provide wider spatial references for some areas rather than others, for mainstream attractions rather than those unknown spots that escape traditional mapping. For these reasons, the PG map reproduces space in a way that substantially limits discovery and disruption: while abstracting the city through a unified output, it defers the infrastructural dimension of Israel's occupation.

#### Lines

When we leave the Old City through Damascus Gate (facing the nearby Palestinian bus station), we stand precisely on the Green Line. At this point, looking westward, a dense network of lines, gyms, and PokéStops brightens the map, otherwise dark for the night-mode colors. Different types of landmarks (such as graffiti, playgrounds, war memorials, public offices, and monuments) invite players to start new PokéWalks in West Jerusalem. Turning our virtual look eastward, few lines and zero PokéStops depict a desertlike East Jerusalem: erasing the segregating lines of the city (and their political and infrastructural complexities), the AR visual outcome of East Jerusalem makes space for the harmonious image of a two-dimensional surface.

The relevance of lines for the urban fabric precedes their use in reinforcing infrastructural power and their virtual abstraction (or absence thereof). From the Roman castrum to the postmodern city, cities are the product of furious intersections of lines, where different spaces and surfaces are created, alternate, overlap, and juxtapose. In his *De Pictura*, originally published in 1435, Leon Battista Alberti argues, "If many lines are joined closely together like threads in a cloth, they will create a surface" (1972: 37–38). Five hundred years later, in his 1926 essay "Point and Line to Plane," Wassily Kandinsky proved that avant-garde thinking is not so radically distant from the Renaissance, as "a particular capacity of line [is] its capacity to create surface" ([1926] 1982: 576). Revolving around these interpretations, anthropologist Tim Ingold claims that, in order to understand the relation between lines and surfaces, "it is not enough to regard the surface as a taken-for-granted backdrop for the lines that are inscribed upon it" (2007: 39). Instead, it is the surface as a spatial product of these lines that matters.

At the same time, lines inform functions and concepts beyond their use as geometrical tools and the surfaces they produce. Since the dawn of modernity, the line is perceived as an emblem of "mathematical directness" (Schivelbusch 1986: 58), which transforms natural landscapes into geographical and political spaces through rectilinear bounds such as avenues, hedges, and walls. In this sense, lines possess a devastating effect on the configuration of territories and contested spaces.

In the city of Jerusalem, a complex network of lines generates uneven geographies and defines the spatial syntax of separation. Since 1948 (and through 1967), Israeli authorities created nonpermanent, transforming, and expanding lines of division and segregation. These materialize in the form of borders, boundaries, and infrastructures, thus creating different regimes of mobility that set the rhythm of Israel's occupation in East Jerusalem. As this rhythm intensified between the 1970s and the Oslo Accords in 1993, a new grid of lines (in the form of a sophisticated network of roads) connected the heart of West Jerusalem with the illegal Jewish settlements in the periphery to the east and northeast of the city. Through these lines, Israeli authorities put "facts on the ground" through the creation of a surface characterized by territorial continuity between the western and eastern sides of the Green Line, and coherent to the logic of "greater Israel."9 In addition to this complex grid, the separation wall built in the 2000s trails like a linear ribbon of concrete, running and cutting off parts of what is now a Palestinian hinterland but was previously part of the fabric of the city (locations such as Abu Dis and al-Eizarya). At the same time, less hypervisible and concrete lines penetrate and inform Jerusalem's everyday life. Completed in 2010, the Jerusalem light rail runs from Mount Herzl in the southwest to Heil HaAvir in the northeast and "unites" the West with the East, thus embodying the most efficient trope of infrastructural power that creates spatial continuity between extremes (Nolte and Yacobi 2015). From there, the cityscape of Jerusalem opens up to a matrix of roads that, connecting with the illegal settlements in the West Bank, allows Jewish settlers to move from the core to the periphery and vice versa.

While creating a territorial surface that is in line with the aspirations of a greater Israel, these lines of partition pose multiple geometrical and geopolitical questions regarding the city. Benvenisti (1996)—also former deputy mayor of Jerusalem from 1971 to 1978—argues how, between 1948 and 1967, concerns about the Green Line in Jerusalem were related not merely to length but also to width and thickness.<sup>10</sup> Similarly, the existence of such a small-meshed web should not be understood as the intersectional product of compact and hard lines. In his book Jerusalem Unbound, Michael Dumper describes the city's borders not as a rigid urban form<sup>11</sup> but rather as a milieu in which "visible and invisible lines crisscross its face creating myriad different social, economic, and political groupings" (2014: 235). More specifically, Eyal Weizman has framed the question of the spatial conflict over Palestine in relation to the principle of geographic elasticity, or the extent to which territorial surfaces must be constantly redesigned through lines in order to be efficiently governed. Weizman defines Israeli internal borders as dynamic, constantly shifting, ebbing and flowing; they creep along, stealthily surrounding Palestinian villages and roads" (2007: 7-8). Lines of separation are thus in fluid transformation: settlements can be expanded, evacuated, or removed, flying checkpoints are constantly moving location, while the separation wall is under ongoing development and constantly rerouted (also because of pending court cases and legal litigation).

Within a contextual framework of malleable lines, PG introduces an additional linear stratum to the ever-changing city fabric. While creating a new surface at the intersection between the Zionist imaginary of the city and the Pokémon world, this stratum contributes to the changing patterns of mobility across the city. As virtual strata of different types are constantly added to the city fabric, these patterns of mobility become increasingly influenced by how new technologies abstract the city's realities in virtual realms. In particular, GPS navigation apps dictate mobility around the city in line with different political understandings of space. In the wake of yet another violent escalation (the so-called Third Intifada or Intifada al-Quds in September 2015), Waze—a popular traffic and navigation app for smartphones—started directing Israeli drivers away from the Palestinian areas of East Jerusalem. These "danger zones" (such as Silwan and Wadi al-Joz) erroneously came to be indicated as Areas A or B of the West Bank, under Palestinian Authority control, in order to justify access denial for Israelis. In defense of the Israeli vision of a unified Jerusalem, the city's council representatives vigorously protested, as this erroneous virtualization, in fact, divided the city.<sup>12</sup>

Our *dérive* across the Green Line has shown how PG's grid of lines organizes the mobility of players on the city map through the creation of an AR surface. Distributing game items unevenly, the linear grid stages the separation and division of the city on players' screens. At the same time, as virtual lines of the game supersede the physical (but fluid) lines of separation, our *dérive* indicates that lines are not exclusively point-to-point connectors of disciplined and neutralized walking. On the contrary, they appear and function as the most common geometrical dimension of tools of partition, or the visual outcomes of acts of sovereignty (e.g., borders, fences, infrastructure).

Moreover, our gaming sessions also disclose how PG play and walking provide users with the possibility to look at *lines* as epistemic sources to inquire into the spatial organization of Jerusalem. In fact, those lines on which PG's playability relies show how the city comes to be spatially and geographically organized as a thick grid of intersecting lines—real and less real. As being part of a hyperreal version of Ariadne's thread, PG's lines discipline walking through virtual lines that are solid and infrangible. At the same time, our *dérive* sheds light on how actual lines of separation, albeit missing in the AR, continuously mutate in order to create a governable surface (that is consistent with the Zionist vision of the city). Moreover, after neutralizing the real through the virtual, the game offers a tabula rasa as background, where the lines made for walking direct the users in a paradoxically "empty" East Jerusalem. At this point, as images act as the medium that transmits events, it appears clear how PG's aesthetics serve the theatricality of the Zionist vision over the city. Despite division, Jerusalem must remain unified and indivisible while East Jerusalem's landmarks of Israeli occupation stay invisible within Jerusalem AR voids.

#### Voids

PG enables a walking experience in the city that, while generating knowledge about its AR representation (and its underlying vision), carries an epistemic potential with regard to how space and mobility are organized in reality. In these terms, as much as ever-changing lines of separation disappear in the AR construction of an indivisible Jerusalem, they affect the actual experience of walking (when trying to deviate from the impositions of the game). While the game disciplines walking through a virtual representation of space, then the contrast between the reality surrounding us and its AR visions emerges clearly through the smartphone screen.

This inconsistency is strikingly revealed in the encounter with voids. As lines produce surrounding AR surfaces that appear in different colors, these seem to be somewhat consistent with the characteristics of the nearby environment. For example, whereas green indicates parks or natural areas, light blue identifies a body of water. In the attempt to break the lines of the game, walking outside disciplined paths might lead players into gray surfaces where, in fact, no game exists. These spaces indicate a disruption between the real world and its virtual representation, or the inability of the map to locate an actual area on the outcome of its AR surface.

At the top of Mount Scopus (in the northeastern area of the city), we reach the police checkpoint overlooking the Palestinian neighborhood of Issawiya. This road connects Issawiya to the Hebrew University campus, and it is often blocked by Israeli forces on security grounds or as a form of collective punishment of its inhabitants. This block, cutting vehicle access between Issawiya and the nearby Hadassah medical center, leads to partial—or, at times, total if combined with similar blocks along other access points—isolation of the neighborhood from the rest of the city. With a field of burnt olive trees (nevertheless showing as green on our screen) dividing us from the separation wall toward the horizon on our left, we cross the checkpoint and walk down to the center of the neighborhood. While walking along the virtual lines of Issawiya, main roads and a few Pokémon appear on our map. However, as we run out of PokèBalls (the items needed to catch Pokémon), we wander in vain searching for a nearby PokéStop, where these eggs can be collected. Leaving the neighborhood behind, we continue walking in a northeasterly direction. Suddenly, the linearity of our path seems interrupted, and our virtual character abandons lines to enter a gray void.

We have entered the Shuafat refugee camp, in close proximity to the separation wall (absent in the AR) whose construction sets forth the exceptionality of this area. Albeit cut off from the city by the wall, Shuafat is technically part of Jerusalem's municipal boundaries. For this reason, its inhabitants can access the city, a right that remains denied to other Palestinians living beyond the wall. A recently opened six-lane checkpoint regulates entrance to the city, relegating Shuafat to a sort of limbo. This exceptionality appears to be harmonized in PG's virtual representation through a gray void replacing the separation wall, the checkpoint, and the refugee camp in its entirety.

The encounter with voids introduces a double question. First, just as the general absence of PokéStops and lines in the occupied East proves a disparity between West and East in terms of playability, the appearance of voids relates to the game's realization, as well as to compelling questions regarding access, mobility, and the right to the city. The second question, instead, invokes a spatial issue. In architectural discourse, voids represent in truth a controversial category. Against the stigma of constituting and understanding them as "negative spaces," avant-garde and deconstructivist theories pointed at "voids" as instrumental to the creation of "nomadic space" (where a furious and unpredictable shifting of marginal populations emancipates the urban space from the oppression of solid built forms). In this sense, the creation of voids corresponds to a challenge to what exists. Francesco Careri claims that "the nomadic space is an infinite, uninhabited, often impervious void: a desert in which orientation is difficult, as in an immense sea where the only recognizable feature is the track left by walking, a mobile, evanescent sign" (2009: 38). While refusing the idea of absence, the deliberate creation of voids constitutes an active practice, challenging the architectural forms of the city. Indeed, in his article on "anarchitecture," James Attlee (2007) discusses how voids and gaps are deliberately produced as a way to reappropriate the use of *empty* as a radically positive concept and form.<sup>13</sup>

Emptiness, voids, and absence symbolize a subverting practice challenging the verticality of power. Game voids, however, deny these principles and the possibility of subversion. PG in fact relegates voids to a reactionary dimension of nonplay: walking deteriorates the act of traversal to a condition where strolling and deambulating do not serve the phenomenological purpose of unveiling a repressed city. Rather, walking stops inspiring place making and commences

legitimizing a spatial status quo. In so doing, not only do malleable lines (seams, barriers, and fences) disappear when real and virtual layers merge, but the erasure of the refugee camp further advances the game's ignorance of the spatial and urban products of the occupation.

Concepts such as absence, void, and emptiness are not a novelty in the spatial politics of Israel since 1948—particularly with regard to the Green Line. In the aftermath of the 1967 war, Israel adopted a resolution (B/9 Marking of Country's Borders) replacing the 1949 Armistice Line on official maps with the Israeli army's line of deployment at the end of the war (including the Golan Heights, the Sinai Peninsula, the Gaza Strip, and the West Bank).

This strategy of erasure encompassed different domains and practices: from language and place making (such as the West Bank becoming "Judea and Samaria" and thus drawing a connection between the state of Israel and the biblical land of Israel) to infrastructure that since 1967 has "reif[ied] the erasure of borders ... between Israel's territory and the regions it had captured" (Gordon 2008: 7). Similarly, between 1967 and the First Intifada (1987–1993), the Israeli government favored settlement construction, as it "served, among other things, to erase the Green Line in the [settlers'] own minds as well as in the minds of the citizens within Israel" (8). In fact, questions of borders reappeared in Israeli public discourse only in the aftermath of the Second Intifada (2000–2005) and the construction of the separation wall (85 percent of which runs east of the Green Line in Palestinian territory). In line with the tradition of those maps and cartography keeping the Green Line invisible from Israel's visual representations, the AR map not only erases the Green Line, but it also makes spatial products of the occupation disappear into voids.

Abstracting space into voids, PG provides players with a depopulated and neutralized image of East Jerusalem, emptied of the fetishes of the occupation. The refugee camp, together with the wall, seems indeed forced into a representational aesthetic limbo and visual suspension (where the image of the void of the virtual map blurs with the *full* of the real urban environment). Rather than revealing the tyranny of urban enclosure in a context of military occupation, voids are used as images that, while hiding the status quo, eventually celebrate it.

Proceeding in a northeast direction, we leave the Shuafat refugee camp and its virtual void behind. As we get back on the lines of the game, the gray color of the map swiftly vanishes to make space for a colorful environment with many flashing items: we are now facing the Israeli settlement of Pisgat Zeev. Named after right-wing revisionist Zionist Zeev Jabotinsky, Pisgat Zeev lingers as the largest residential settlement in East Jerusalem. At the very entrance of the settlement (facing Moshe Dayan Street), roads seem carefully reported on the map through a dense network of walkable lines. The availability of many PokéStops and gyms in the immediate surroundings materialize the settlement as the most playable area in our walk throughout East Jerusalem.

While erasing and representing native spaces as empty *terra nullius*, AR technology intervenes as constitutive power by legitimizing and celebrating illegal settlements. Keller Easterling similarly argues that infrastructure cannot simply be considered as a "hidden substrate" or "physical networks for transportation, communication, or utilities" (2014: 11). Rather, they work as "extrastatecraft": through repeatable parameters, products, standards, and formulas, they set the structure of urbanism and space. In fact, "some of the most radical changes to the globalizing world are being written, not in the language of law and diplomacy, but in these spatial, infrastructural technologies" (15). Whereas infrastructural projects relied on the administrative authority of the state in the nineteenth century, today's geographic and spatial arrangements can be considered the product of international, intergovernmental, nongovernmental, and corporation players.

Functioning as extrastatecraft, AR in East Jerusalem further advances the spacio-cide argument: it is a matter not of seizure or division of a territory, but of its abolition (Hanafi 2006: 93). In fact, while Hanafi discusses questions of erasure beyond traditional warfare (and with a focus on demolition, taxations, and residency laws), game voids constitute the ultimate symbolic and virtual stage, where the premises of settler colonialism can be turned eventually into reality with the final erasure of the native population from the land. In this way, juxtaposing PG's voids on Shuafat's *full*, we do not witness an incongruence between virtual and real. On the contrary, the discrepancy anticipates and represents the ideological premises of Israel's colonial project.

#### Conclusions

Digital representations of cities often reproduce and reinforce the social and political inequities that exist on the ground. While embedding characteristics of reality into a virtual setup, AR gaming aspires to be more than a reproduction and, instead, to create its own reality. Our *dérive* along the Green Line indicates how this supplementary coat of reality, instead of staging the embedment or divide between virtual and real, proves the functionality of PG in strengthening the spatial arrangements of occupied Jerusalem. While maintaining the invisibility of the Green Line, the game adds a layer of virtuality that completes the malleability that characterizes those elastic grids of military and civilian infrastructures of separation already existing in physical Jerusalem.

Following the Green Line, this study also shows the complexity of an urban spatial order that functions and operates overlapping different layers of reality (virtual and physical) while, at the same time, keeping borders as invisible images. Here the virtual intervenes, creating a paradoxical coexistence between *augmented* and *diminished* reality. As the line uniquely represents both the operational and symbolic/aesthetic features of colonial infrastructural power, it produces sovereignty while erasing its symbols from visual representations. This argument hence stretches Hanafi's question of spacio-cide further to virtual/augmented reality, not as negation of the physical but as its completion. In addition to military, civil, and judicial powers, AR intervenes, offering a digital representation of the city that deliberately cancels the spatial products of the Nakba and the occupation (such as refugee camps and the separation wall) and polishing away native places from its representation.

Beyond the legitimization of the spatial status quo, the game also seems to serve the purposes of a partisan vision of the city that has been declared "indivisible." Lines and voids in fact accompany and drive PokéWalks in a way that partakes in the *making* of Jerusalem as the united city envisioned by Zionism, which leaves open the possibility of a territory in continuous expansion.

In a context where free mobility continues to be restrained on grounds and logics of securitization (with an increasing number of roadblocks and stable or flying checkpoints), PG triggers a practice of walking that, rather than liberating its disruptive force (or simply stimulating commonality) seems, as shown in our *dérive*, to turn into an agent of legitimation of the status quo. This study shows that acts of playing and walking with PG in Jerusalem are removed of their intrinsic, and more or less conscious, potential for challenge or disruption. While unpacking the colonial imaginary produced in the AR map of East Jerusalem, our study suggests that any degree of profanation (an intrinsic quality of playing) goes missing. Giorgio Agamben claims that playing "frees and distracts humanity from the sphere of the sacred, without simply abolishing it" (2007: 76). There, the spirit of profanation "deactivates the apparatuses of power and returns to common use the spaces that power had seized" (77). In the context of AR's East Jerusalem, the act of playing has been neutralized. While walking has lost its creativity, playing has also lost its irreverence. Unlike Agamben's description—by keeping intact the spatial coexistence between prefixed lines and fictional voids—the acts of playing and walking have abandoned all their disruptive premises in PG's narrative and representation of today's Jerusalem. In this way, as if it were a modern version of Dante's representation of the circles of hell, where concentric circular lines distribute humans and their sins into spaces with no interaction, Jerusalem's regime of separation looks more than ever well protected and preserved.

- **FABIO CRISTIANO** is a doctoral candidate in the Department of Political Science at Lund University (Sweden). His research interests lie at the intersection of international relations (IR), cyberwarfare, and critical theory. He is currently finalizing his thesis on Palestinian cyberwar and hacking, engaging with the concept of jihad in order to explore how sovereignty and subjectivity are reproduced in relation to virtuality. Other areas of interest are war simulations, gaming, cyberdiplomacy, and the Internet as human right. At Lund University, he also convenes and teaches various courses on IR theory, diplomacy, war theory, Palestine-Israel, development studies, and digital pedagogy.
- **EMILIO DISTRETTI** is the head of the Urban Studies and Spatial Practices Program at Al Quds Bard College for Arts and Sciences in Abu Dis (Occupied Palestinian Territory), as well as a research fellow at the Kenyon Institute (Council for British Research in the Levant) in East Jerusalem. He holds a PhD in aesthetics and politics of representation from the School of Art and Design at University of Portsmouth (United Kingdom). His research interests are multidisciplinary with a strong emphasis on new materialism, comparative colonial histories, geography, and theories of space. His current research explores representation and transformation of deserts as colonial spaces.

#### NOTES

- 1. Pokémon Go is a free-to-play augmented reality game available for iOS and Android devices.
- 2. Palestinian telecommunications—landlines, cellular, and Internet services—are under Israeli control in the Occupied Palestinian Territory comprising East Jerusalem, the West Bank, and Gaza.
- 3. Our game sessions were conducted in August 2016. Because of the rapidly changing reality of the game, we acknowledge that the AR outcome may appear different at the time of publication.
- 4. This article is written with the awareness of our own position as white, male European academics. Additionally, in a highly racialized, gendered, and politicized reality, we acknowledge that these privileges allowed us to practice acts of walking otherwise denied to Palestinians.
- 5. Artist François Alÿs brought to the attention of the public the epistemological value of making lines through walking in the context of Palestine-Israel. In 2004, when the separation wall was under construction to the east of the Green Line, Alÿs walked along the Green Line dribbling green paint behind him. This raised the memory of the Armistice Line penciled by Moshe Dayan and Abdullah el Tell in 1948.
- 6. Most PokéStops are a reproduction of "portals," serving a similar scope in Niantic's previous game *Ingress*. Players can suggest new PokéStops to Niantic, which then decides whether to create them. This option was, however, terminated shortly after the game's release.
- 7. Players can enter gyms to battle rivals and gain prestige through territorial control for their team. Displayed on the map as flashing towers, gyms are an advanced feature of the game and can only be accessed by players with higher levels of experience (XP). Catching Pokémon allows players to receive XP points and advance levels in order to unlock other features of the game.

- 8. The appearance of Pokémon along the traced virtual lines is randomized through algorithms, currently undisclosed by developers. Different types of Pokémon (water, grass, fighting, etc.) appear in different actual areas that somehow correspond to their natural habitat. Accordingly, while normal Pokémon appear everywhere, the likelihood of catching a water one augments in the proximity of rivers, lakes, or any body of water. Similarly, electric ones are often found in industrial areas, whereas the ghost type abounds in the proximity of worshipping places. A game option allows players to identify what types of Pokémon, players need to wander around their current locations with no precise indications. Niantic has not disclosed the algorithm used to calculate dynamically the wild Pokémon spawn rates in different areas, because of the proprietary nature of the application. However, users have reported a correspondence between population (both fixed and dynamic) and Pokémon density. Most populated neighborhoods allow for a greater playability, whereas Pokémon are reported to be scarce in peripheries and less popular places.
- 9. As shown by DAAR's (Decolonizing Architecture and Art Residency) analysis on the legal-spatial impacts of the Green Line in the West Bank, the question posed by Benvenisti ("Who owns the width of the line?") finds its answer in the two-dimensional surface created by the line itself. The line, while crossing urban and rural areas, buildings, and public and private spaces of different sorts, turns into "an extraterritorial zone—a site for a new 'borderline state" (Hilal et al. 2013: 206).
- Sketched on a scale of 1:20,000, the line "represented strips of land sixty to eighty meters in width," a cartographic and political monstrosity turning "a densely built-up city" (Benvenisti 1996: 57) into a no-man's-land, a real urban limbo.
- The specificity of Jerusalem's border ecosystem, Dumper claims, is due to the intersection of *soft* (jurisdictions, educational systems, parallel processes of political representation, religious autonomies) and *hard* borders (walls, fences, checkpoints) in constant overlap (2014: 15–17).
- 12. Before PG would enter and dominate the sphere of AR gaming, the division of the city (operated by Waze's algorithm) has been proof of two complementary events: (1) the long-lasting struggle around representation and the visualization of Palestinian-Israeli reality between the Zionist mythology and the reality on the ground; and (2) the virtual, created by apps, GPS, and video games, redesigns of an infrastructural grid under ongoing development.
- 13. For example, Eyal Weizman (2007: 209–210), refers to artist Gordon Matta-Clark's cuts on buildings that were about to be demolished and, by subtracting material from the built form, the void was turned into artwork, a proactive agent for building preservation.

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