## Expo '27: Designing and User-Testing a Dystopian Augmented Reality Game

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This talk introduces In the Mesh, a mobile browserbased augmented-reality (AR) "first-person stroller" game set in Montreal, and designed by teams at three universities in Canada and the UK to provoke critical thinking about social progress. The game begins in 2027, in a period that follows "The Ruinations," a series of economic crises and ecological disasters--the time before the endtimes. Montreal is in the process of separating from Quebec, and is a quasi-autonomous city-state with an institutionalized class divide. The ruling class governs the city from the security of the former Expo '67 site, itself once an experiment in the technological management of crowds, where they enjoy a luxurious lifestyle in Moshe Safde's Habitat '67. These so-called 'Habs' rule over the Hab-Nots, who occupy the dilapidated buildings and subterranean tunnel system of the downtown core, where they breed resentment and resistance. With security a high concern, the Habs have decided to send an agent to infiltrate Exodus, the terrorist cell which is threatening to overthrow the Habs' control.

You play an elite spy, codenamed Agent Angélique after the runaway slave who was tortured and hanged in 1734 for allegedly setting fire to Old Montreal, a reminder of the city's historical layers of reconstruction and capitalist violence. You move through the city equipped with a mobile "mesh" networked device searching for "Exodus," the shadowy underworld resistance movement. Along the way, you receive official government propaganda messages that hint at the shape of this future techno-dystopia, along with verbal and visual hints from Exodus leading to a secret final location, where the story's ultimate mysteries can be solved through an augmented-reality puzzle.

Built with the REDACTED locative media authorware and the REDACTED augmented reality platform, *In the Mesh* uses an imaginary medium--the futuristic Mesh device, really an extrapolation of the user's

smart phone--to perform an archaeology of the City of Montreal, digging into the layers of its technotopian, midcentury-modernist architecture and planning. With the Mesh device in hand, players explore the locative dystopia of surveillance and control, alongside the utopian potential of locative media to evade authority and generate new spaces of hope and community within the city's all but forgotten courtyards, tunnels, rouelles and culs-de-sacs, the interstices of urban life.

Unlike Oculus Rift and similar systems that immerse the largely stationary user in a complete virtual world, our game forces the user to toggle between the real city around them and our virtual future. Its assets are like the "dialectical flashes" of a forgotten Golden Era that Walter Benjamin saw emanating from even the most degraded products of consumer culture, fleeting intimations of the social totality that rise up from lost and broken media, disrupting the "homogeneous, empty time" of technological progress. Paradoxically, In the Mesh flashes back not to a pre-capitalist Golden Era, but to the recent past of the cybernetic and Quiet revolutions, when nationalism, technological progress, and countercultural values still overlapped significantly, and hope was still embodied in the heavy infrastructure of monorails and geodesic domes. The dome is our arcade, a symbol of communal life at once futuristic and obsolete, just like our Occuluses, iPhones, Google Glasses, and other reality-altering devices that teeter perpetually on the edge of obsolescence.

This paradox expresses the temporal ambivalence of Benjamin's messianism. Its spatial ambivalence is expressed through the fundamental paradox of using GPS, mobile devices, and other technologies of wayfinding to reach the placelessness of the everyday utopia, of fantasies and dreams, the excess that capitalism generates but cannot assign to any place. In the Mesh is not played on a screen, but out in the streets, among the shared spectacle of embodied crowds. It engages in what Michael Gardiner calls "everyday utopianism," which "involves the realization that utopias themselves are always 'embodied' in particular spatial arrangements... [and] social practices (architecture, city planning, legal statutes), but are also materialized in actual human bodies (through the auspices of fashion, body modification, performance, reconfigurations of habitus, and so on) (20-21).

Gardiner links everyday utopianism to thinkers like Fourier, Bakhtin, Michel de Certeau, and the theorists of the Situationist International, Henri Lefebvre and Guy Debord. This theoretical lineage is the same usually trotted out to explain LARPs, ARGs and locative games, which invite users to participate in practices of tactical engagement with urban space that are very similar to Situationist practices of psychogeography, *flâneurie*, and the *dérive*. And yet, as *In the Mesh* demonstrates, Debord's understanding of the Society of the Spectacle cannot account for the ways in which mobile or locative games are actually encountered and experienced, nor how digital games have altered the media spectacle's structure of feeling.

This presentation will augment the usual theoretical apparatus, by situating mobile gaming in relation to new theories of mesh networks, virtual embodiment, and utopianism. It will describe the design process, code, and algorithms behind *In the Mesh*, and document our first round of on-site user tests, scheduled to be conducted in Montreal in May-June of 2017.

Depending on the outcome of these user tests, we also hope to make an advance playable version available to delegates of ADHO.