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## Locative Media as War. By Sophie Le-Phat Ho

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**abstract** The Transborder Immigrant Tool is being developed at the Calit2 Lab of UCSD (University of California, San Diego) by a team of electronic disturbance artists composed of Ricardo Dominguez, Brett Stalbaum, Micha Cárdenas and Jason Najarro . The project aims to reduce the number of deaths at the US/Mexico border by providing a device that migrants can use to locate resources, such as water caches and safety beacons, as well as situate themselves in the desert. The author explores the tool's intervention in bringing together questions of artistic value and humanitarian value in the current landscape of mobile and locative media art.

**résumé** Un groupe d'artistes de résistance électronique du Calit2 Lab à UCSD (University of California, San Diego), composé de Ricardo Dominguez, Brett Stalbaum, Micha Cárdenas et Jason Najarro, développe en ce moment le "Transborder Immigrant Tool". Ce projet vise à réduire le nombre de morts à la frontière mexico-américaine par le biais d'un appareil que les immigrants pourront utiliser afin de repérer des lieux sécuritaires ou de l'eau, ainsi que d'être en mesure de se situer eux-mêmes dans le désert. L'auteur explore l'intervention que l'outil provoque en rapprochant la question de la valeur artistique avec celle de la valeur humanitaire dans le paysage actuel de l'art médiatique mobile et locatif.

I always have a vague yet persistent feeling of uneasiness when it comes to mobile and locative media art: a sense of play and liberty coupled with a tragic consciousness of locative media's capitalist blood ties. The politics and economics of mobile locative art have been partially addressed in issue 7 of .dpi , "Hard Mobility" (http://dpi.studioxx.org/demo/?q=en/no/07/hard-mobility) , on mobility and hacking, 1 (#\_edn1) but can be further illustrated here by relatively well known projects that make use of Global Positioning System (GPS) enabled cellphones and PDAs to transform cities into sites of play. These projects include the various works of Blast Theory (http://www.blasttheory.co.uk/) 2 (#\_edn2) and the likes of Urban Tapestries (http://urbantapestries.net/) 3 (#\_edn3) by Proboscis (http://proboscis.org.uk/) , 4 (#\_edn4) which all clearly show how blurry the lines can become between artistic practice, academic research and corporate interests. Various military-industrial-entertainment complexes are part of today's reality and determine the terms of our contemporary constructions of utopia.

Demo of the tool's main operation from the poster by Jason Navarro ]

A beta version of the Transborder Immigrant Tool was programmed on the J2ME platform and deployed on a Motorola i455 cell phone. Below is a demo of the tool's main operation.

1. Normal Navigation

2. Course Alteration

3. Waypoint Detection

4. Target Destination Set

Against this backdrop, the Transborder Immigrant Tool stirred my interest. The tool is being developed at the Calit2 Lab of UCSD (University of California, San Diego) by a team of electronic disturbance artists composed of principal investigators Ricardo Dominguez and Brett Stalbaum and researchers Micha Cárdenas and Jason Najarro. The project, funded by Arts and Humanities (Transborder Grant 2007-08) at UCSD and winner of the Transnational Communities Award in 2007, aims to reduce the number of deaths at the US/Mexico border by providing a device that migrants can use to locate resources, such as water caches and safety beacons, as well as situate themselves in the desert. The tool is built on a Motorola i455 phone because it is cheap (around \$40), requires no service for GPS functionality and accepts new algorithms such as the Virtual Hiker (http://www.paintersflat.net/virtual\_hiker.html), developed by Brett Stalbaum. This particular algorithm "produces computationally derived paths from data in such a way that allows them to be re-followed through the actual world." 5 (# edn5) Thus the Transborder Immigrant Tool acts like a compass, while the phone also vibrates in response to certain landmarks, such as water or a highway, which then allows the user to keep his or her eyes on the landscape rather than the phone's screen.

The tool is being developed in stages. These include: GPS mapping the Mexico/US border; researching current and pre-emptive transborder networks and infrastructures (e.g., Homeland Security, Halliburton, Minutemen, etc.); compiling water and food anchors established by support communities along the border; developing the algorithm and testing the GPS coordinates; creating an interface in English and Spanish along with instructions for use; testing the Transborder Immigrant Tool; and distributing the tool to migrant communities. Each tool, branded as an art project by the Electronic Disturbance Theater and b.a.n.g. lab, would need to be returned once it reaches an end anchor point for upgrades and further distribution. The team also wants to design, with the help of teachers, instructions for use and upgrades that would convey the simplicity of safety airplane cards. At the moment, the team is rigorously testing a beta version of the software installed on a handful of phones. The researchers are also working on a website in order to present the project to the public, as well as to meet with migrant support groups in Mexico in order to set up workshops and develop distribution methods.



Brett and GPS tool in front of SUV" Photograph by Ricardo Dominguez

The used cellphones are not free but affordable on ebay. In terms of openness of the software, Brett Stalbaum mentions that American consumers are unable to add software to their cellphones. On the other hand, he continues, it would be possible to set up a recycling program with European, Asian and South/Central American and Mexican handsets coming to Mexico. These would need to have real GPS antennas, be capable of running CLDC 1.1, MIDP 2.0, and JSR 179 location API, and be unlocked for loading software. They do not need wireless service.

The Transborder Immigrant Tool ingeniously contrasts with the kind of locative media art we have come to be used to. In their own words, "[the tool] would add a new layer of agency to this emerging virtual geography that would allow segments of global society that are usually outside of this emerging grid of hyper-geo-mapping-power to gain quick and simple access with to GPS system." 6 (# edn6) The project also differs further from the aims that usually lie behind the use and the research surrounding locative media by going beyond, on the one hand, the paradigm of a post net art desire for embodied experiences and action over representation. The latter is encapsulated, for example, in statements such as "locative media emerged over the last half decade [2000-2005] as a response to the decorporealized, screen-based experience of net art, claiming the world beyond either gallery or computer screen as its territory." 7 (# edn7) On the other hand, also exceeds the "locative commons" paradigm of a grassroots, community-shared knowledge of information layers that gradually construe the "Internet of things" and/or ubiquitous computing, as exemplified by Ben Russell's Headmap Manifesto. 8 (# edn8) In other words, the Transborder Immigrant Tool is a singular device because it shows that mobile locative media art is ultimately about biopower . 9 (# edn9) In the midst of discourses of urban re-appropriation and psychogeographic adventure is the question of life and death.



Ricardo and the Border Patrol" Photograph by Brett Stalbaum

While it might be less evident to consider 'bare life' 10 (# edn10) when one thinks of geocaching (http://www.geocaching.com/) 11 (# edn11) for example, an outdoor treasure-hunt for "GPS users" around the world, other works of locative media make a more transparent link between the technology and biopolitics, such as Christian Nold's Bio Mapping (http://www.biomapping.net/) project. The latter takes a literal view of psychogeography, so to speak, by mapping levels of "arousals" as participants are provided with a Galvanic Skin Response (GSR) device, which indicates the emotional arousal of the wearer in relation to his or her geographic location. As Nold's website states, the idea behind Bio Mapping is for communities to develop bottom-up systems of monitoring and therefore acquire better and more personal ways of recording and sharing social space by "inverting the control paradigm of biometric technologies." 12 (# edn12)

But the Transborder Immigrant Tool is different. It is a humanitarian tool. In a context where the relationship between the military and humanitarian NGO's is increasingly worrisome, the device prepares the terrain for a different and new assemblage. Micha Cárdenas reports that the relationship between the research team and the local groups that do support work is essential to the very existence of the project. An organiser of the no borders and migrant rights movements in San Diego and Tijuana for a few years, Cárdenas is able to build on various relationships with groups like Border Angels (http://www.borderangels.org/) 13 (# edn13) that, among other things, distribute water in the desert: "We've met with them numerous times, volunteered with them and gotten feedback on the project and incorporated it into our plans." As such, systems are being devised to allow the groups to be able to download and install the software themselves. Indeed, one of the concerns of the groups they are working with is the question of access to the maps, as Cárdenas notes, " they don't want the maps to be totally public because, in this netwar condition in the borderlands, there are lots of parties who would use that information to disrupt the aid efforts, such as the border patrol, the Minutemen and other anti-immigrant vigilante hate groups like them." Therefore, in addition to working on establishing relationships with groups who can distribute the tool, the above concerns have influenced the way the software is actually being written. For instance, by encrypting the map data so that one cannot extract the entire map simply from having the phone, and by abstracting out parts of the software that can be useful to others, such as a compass widget, that would then be available for download. However, as Brett Stalbaum notes, "at the end of the day, the goal is that we will not control or even have access to any of the activist geolocative information, at all [...] Our role is to make tools by listening to the users, such

that they can deploy the system and control data as they see fit."

Interestingly enough, when contacted by the research team, the initial reaction of the migrant support groups was one of surprise. Because the Transborder Immigrant Tool allows migrants to cross the border, most groups are amazed that this project is even possible. However, researchers make a point of explaining that the project is a humanitarian one, where the idea is to help provide safety to people who risk death in the desert, while also being part of a long history of walking art, border disturbance and locative media. At issue here is an interesting linkage that is made between humanitarian value and artistic value. While Ricardo Dominguez states, "All the immigrants that would participate would in a sense participate in a large landscape of aesthetic vision" due to the multiple layers of communication (e.g., iconic, sound, vibratory) and the way the tool's algorithm would help the user find a "more aesthetic route," 14 (# edn14) I would suggest that the artistic value emerges from its very linkage with the humanitarian aspect. The Transborder Immigrant Tool subverts the usual idioms of locative and interactive media (such as "virtual reality") to reveal the virtual virtual - in the Deleuzian sense (which is very different) 15 (# edn15) - of locative media. And that virtual, here, is war.

As suggested by the aforementioned netwar at the borderlands, the use of locative media at the US/Mexico border reveals the virtual element of the situation. Following Deleuze's proposition, the virtual is not opposed to the real but to the actual, meaning that war is no less real, as migrants fight for their life at all levels and reveal that, until recently, to simply know one's location has been a privilege. In that sense, locative media is that-which-would-become war. The Transborder Immigrant Tool thus takes part in a war assemblage by pointing to a struggle - that of a global apartheid - and acquires artistic value by virtue of this interventionist element through a process of differentiation. What was about urban games and re-appropriation turns out to be about 'bare life' or 'life in itself', and will from now on carry that trace in this new assemblage. While the recuperation of situationist discourse (of dérive, détournement and psychogeography) by mobile and locative media art have led some to observe that the Society of the Spectacle 16 (# edn16) has never been stronger, for locative media's embrace of capitalism, the Transborder Immigrant Tool shows that Debord's critique of control is still possible.

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## Biography

**Sophie Le-Phat Ho** is a young researcher and cultural organiser. Coordinator of the DOCAM (Documentation and Conservation of the Media Arts Heritage) Research Alliance at the Daniel Langlois Foundation for Art, Science and Technology, she recently completed an MA in Anthropology of Health and the Body in the 21C at Goldsmiths College (University of London). She was interim Programming Coordinator for Studio XX in 2005-06 and was the Editor-in-Chief for .dpi in 2006. She has also worked as Project Officer for terminus1525.ca at the Canada Council for the Arts. She is one of the curators of Upgrade Montréal on politics, culture and technology, as part of Upgrade International. The co-founder of Artivistic ( artivistic.org ), she works at the intersection of art, science and activism.

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1 (#_ednref1) "Hard Mobility", .dpi , issue no.7, October 2007 < http://dpi.studioxx.org/demo/?q=en/no/07/hard-mobility
(http://dpi.studioxx.org/demo/?q=en/no/07/hard-mobility) > [Consulted May 2008]
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- 2 (#\_ednref2) Blast Theory < http://www.blasttheory.co.uk/ (http://www.blasttheory.co.uk/) > [Consulted May 2008]
- 3 (#\_ednref3) Urban Tapestries < http://urbantapestries.net/ (http://urbantapestries.net/) > [Consulted May 2008]
- 4 (#\_ednref4) Proboscis < http://proboscis.org.uk/ (http://proboscis.org.uk/) > [Consulted May 2008]
- 5 (#\_ednref5) The Virtual Hiker < <a href="http://www.paintersflat.net/virtual\_hiker.html">hiker.html</a> (http://www.paintersflat.net/virtual\_hiker.html) > [Consulted May 2008]
- <u>6 (#\_ednref6)</u> "Transborder Immigrant Tool", *The Thing* < <a href="http://post.thing.net/node/1642">http://post.thing.net/node/1642</a> [Consulted May 2008]
- 7 (#\_ednref7) Tuters, Marc and Kazys Varnelis. "Beyond Locative Media", Networked Publics Blog < http://networkedpublics.org/locative\_media/beyond\_locative\_media?q=locative\_media/beyond\_locative\_media?q=locative\_media/beyond\_locative\_media?q=locative\_media?d=locative\_media.d=lo

(<a href="http://networkedpublics.org/locative\_media/beyond\_locative\_media/q=locative\_media/beyond\_locative\_media)"> [Consulted May 2008]</a>

- 8 (#\_ednref8) Headmap Manifesto < <a href="http://www.technoccult.com/library/headmap.pdf">http://www.technoccult.com/library/headmap.pdf</a> (http://www.technoccult.com/library/headmap.pdf > [Consulted May 2008]
- 9 (#\_ednref9) See Michel Foucault's life work...
- 10 (#\_ednref10) Agamben, Giorgio (1998). Homo Sacer: Sovereign Life and Bare Life, Stanford University Press.
- 11 (#\_ednref11) Geocaching < http://www.geocaching.com/ (http://www.geocaching.com/) > [Consulted May 2008]
- 12 (#\_ednref12)\_Bio Mapping < http://www.biomapping.net/ (http://www.biomapping.net/) > [Consulted May 2008]
- 13 (#\_ednref13) Border Angels < <a href="http://www.borderangels.org/">http://www.borderangels.org/</a> (http://www.borderangels.org/) >; another human rights group is Casa Migrante in Tijuana <a href="http://www.migrante.com.mx/Tijuana.htm">http://www.migrante.com.mx/Tijuana.htm</a> ; etc.
- 14 (#\_ednref14) Ramey, Corinne (November 17, 2007). "Artivists and Mobile Phones: The Transborder Immigrant Project, MobileActive.org < <a href="http://mobileactive.org/artivists-and-mobile-pho">http://mobileactive.org/artivists-and-mobile-pho</a> (http://mobileactive.org/artivists-and-mobile-pho) > [Consulted May 2008]
- 15 (#\_ednref15) Roe, Phillip. "That-which-new media studies-will-become", Fibreculture, issue 2 < http://journal.fibreculture.org/issue2/issue2\_roe.html (http://journal.fibreculture.org/issue2/issue2\_roe.html) > [Consulted May 2008]
- **16** (# ednref16) An English translation of Guy Debord's "La société du spectacle" available here: <a href="http://www.bopsecrets.org/SI/debord/">http://www.bopsecrets.org/SI/debord/</a> (http://www.bopsecrets.org/SI/debord/) [Consulted June 2008]