SERIOUS GAMING

CRITIQUES OF NEOLIBERALISM IN THE WORKS OF RICARDO MIRANDA ZÚÑIGA

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This chapter considers the serious game/alternative game projects of the U.S.-Nicaraguan artist Ricardo Miranda Zúñiga, whose works often draw on his bi-cultural heritage and display a strong awareness of social inequality and discrimination. His projects combine digital technologies with physical objects, installations and audience interaction, creating artworks that involve both online interaction and public participation in the streets. The first of Miranda Zúñiga's works under consideration in this chapter is the collaborative project, *The Miracle of Chile* of 2010. Involving workshops, an interactive game, posters on public transport and street interaction with portable electronic devices, *The Miracle of Chile* explores the contradictions in Milton Freidman's model, and invites participants to submit their own responses to his famous slogan. The chapter analyzes how, through resistant gaming techniques, this work interrogates Milton Friedman's famous assertions regarding the "economic miracle" of Chile as representing the purported success of the neoliberal, free-market model and encourages participants to question this model.

The second work under consideration is Miranda Zúñiga's *A Geography of Being: una geografía de ser*, an interactive installation consisting of a video game along with sculptures that contain electronic circuits and react to the game. The chapter analyzes how this video game functions as a resistant game that, far from drawing the user into a purely ludic, pleasurable world, encourages him or her to reflect on social issues. As the player is positioned in the role of an undocumented youth, s/he needs to negotiate the game and learns about the hardships that these young people face.

Ricardo Miranda Zúñiga is one of the leading artists of Latin American origin living and working in the U.S. today. Born of immigrant parents, and growing up between Nicaragua and San Francisco, his artworks often draw on this bi-cultural heritage and display a strong awareness of social inequality and discrimination. His art combines digital technologies with physical objects, installations and audience interaction, creating artworks that involve both online interaction and public participation in the streets. Amongst his many artistic projects are early pieces such as *U.S. Authorities Say…* (1999), which combines a video camera with an audio recording of a montage of excerpts from news reports, or *Cargo Load* (also 1999), which is a performance piece based around a sculptural vehicle and a digital short-wave radio. More recent pieces include *Vagamundo: A Migrant's Tale* (2002), which was the first of his artworks that ventured into the video game format as an art form; *Dentimundo* (2005), comprising an interactive website with an avatar promising us a "cybernetic tour of the Mexican border"; *Carreta nagua, siglo XXI* (2007), combining physical installation, digital animation and citizen participation; and *Votemos.us ¡México decide!* (2008), which consists of a website that proposes that, due to the constant circulation of people, products and capital between the U.S., Mexicans should be invited to vote for the U.S. president.

In all of these works, Miranda Zúñiga combines digital technologies with face-to-face interaction. As Miranda Zúñiga himself stresses:

> With each project, I approach art as a social practice that seeks to establish dialogue in public spaces (both physical and virtual) to broaden the work of art. I view the street as an incredibly rich arena for interactive works that employ illustration, animation, sound and interactivity to draw an audience and ideally initiate a fruitful discussion.[1]

Miranda Zúñiga often makes use of gaming formats, such as computer games or puzzles, and it is two such works that are under analysis in this chapter. As the chapter argues, through the critical stance that we are encouraged to take in the game, and through the insertion of socio-political commentary into the game world, the conventional scope of the game is challenged. In this way, Miranda Zúñiga's artistic practice shares similarities with other of the projects examined in this volume, particularly in his attempts to critique the structural inequalities that underpin the gameworld; see, for example, Loban and Apperley, who talk about software modification in grand strategy games as ways of reimagining indigenous communities, and how, through process such as oral history and inserting cultural information into the game, those who are conventionally depicted in such games as subjects of European colonialism can be given agency. Miranda Zúñiga's practice can be understood in terms of recent trends in what has been variously termed alternative gaming, political game-art, or experimental game projects.[2] Often conceived of in opposition to, or as a critical development of, the commercial entertainment games industry, alternative gaming can be seen as a response to the forces of neoliberalism that commercial games are frequently seen to uphold.[3] In her overview of the growing alternative computer games scene, Tiffany Holmes proposes the term "art games" to describe "an interactive work, usually humorous, by a visual artist that does one or more of the following: challenges cultural stereotypes, offers meaningful social or historical critique, or tells a story in a novel manner."[4] I argue that Miranda Zúñiga's work can be understood within this trend of "art games," through his deliberate use of gaming techniques in order to critique the current socio-political conditions depicted in his game world.

The first of Miranda Zúñiga's works under consideration in this chapter is the collaborative project *The Miracle of Chile* (2010), on which Miranda Zúñiga worked in conjunction with Kurt Olmstead, and which was presented as part of the *Portables* exhibition curated by Ignacio Nieto. The work is a multimedia project, involving workshops, an interactive game, posters on public transport and street interaction involving portable electronic devices. In their blurb about the project, Miranda Zúñiga and Olmstead state that when they were invited to participate, they were "already deep into investigating the root causes of the current financial crisis," and that, as a result, it seemed "natural"

1. Ricardo Miranda Zúñiga, "Artist Statement," http://www.ambriente.com
2. Laetitia J. Wilson uses the term "political game-art" to describe games in which the political content works to "morph the play-space into a think-space"; see Wilson, "Encountering the Unexpected: Play Perversion in the Political Art-game and Game-art," in *Proceedings of the 2006 International Conference on Game Research and Development* (Perth, 2006), 269. Patrick Crogan uses the term "experimental game projects" to describe works which involve a "critical interrogation of gaming culture"—see Crogan, "Playing Through: the Future of Alternative and Critical Game Projects," in *Worlds in Play: International Perspectives on Computer Games Research*, eds. Suzanne de Castell and Jennifer Jenson (Peter Lang, 2007), 88. Andreas Jahn-Sudmann, meanwhile, lists the terms "Games with an Agenda," "Serious Games," "Persuasive Games" or "Social Change Games" to describe the types of games which "are explicitly arranged as a critical, interceding practice in order to call attention to social problems in the 'real world'"—see Jahn-Sudmann, "Innovation NOT Opposition the Logic of Distinction of Independent Games," *Eludamos: Journal for Computer Game Culture* 2 (2008): 9.
3. This is not to say, of course, that players of commercial gaming environments do not engage in resistance practice, and attempt to challenge the ideologies underpinning the game world; as Nick Dyer-Witherford and Grieg de Peuter have noted, gamers "sometimes resist the dominant messages" encoded within games and manage to produce "alternative expressions" from within; see Dyer-Witherford and de Peuter, *Games of Empire: Global Capitalism and Video Games* (University of Minnesota Press, 2009): 193. Rather, the point is that the implied player (to follow Wolfgang Iser's notion of the implied reader) of the commercial video game is meant to comply with the ideologies of the game world, whereas in alternative gaming, the player is encouraged to resist or trouble the ideologies; see Iser, *The Act of Reading: A Theory of Aesthetic Response* (Johns Hopkins University Press, 1980).
4. Tiffany Holmes, "Arcade Classics Spawn Art? Current Trends in the Art Game Genre," in *Proceedings of the 5th International Digital Arts and Culture Conference* (RMIT University, 2003): 46.

to think of a link to Chile.[5] They go on to say that they became very interested in "the use of Chile by the neoliberals as a rhetorical weapon in their ideological battle."[6] Here, their words make reference to the now infamous phrase attributed to Milton Friedman, that of Chile as an "economic miracle" as a result of the implementations of neoliberal policies by the so-called "Chicago boys."

The term "Chicago boys" refers to the group of Chilean economists who studied in the U.S. under Milton Friedman, and who became, as Silva terms it, his "unconditional disciples."[7] Convinced that the implementation of a free market economy was the solution to Chile's problems, the Chicago boys were leading figures in this implementation under the Pinochet military regime of 1973-1990, and they advocated privatization, deregulation, cuts to social security programs and new labor laws. Yet more than just neoliberal technocrats, the Chicago boys were very closely allied with, and played a strategic role in, Pinochet's regime;[8] they were, as Silva puts it, the "organic intellectuals of the military regime," because they "played a key role in the attempt to institutionalize the dictatorship," and "elaborated sophisticated discursive answer to the latent contradiction in the co-existence of economic liberalism and political authoritarianism."[9] Indeed, Orlando Letelier, shortly before his murder in 1976—widely believed to be due to his opposition to the Pinochet regime—described the role of the Chicago boys as lying in the fact that they were "prepared to supplement the brutality, which the military possessed, with the intellectual assets it lacked."[10]

Moreover, in addition to the fact that the Chicago Boys, in their implementation of the "Chilean miracle," propped up and provided the technocratic-intellectual justification for the Pinochet regime, the long-lasting effects of their policies also had serious social consequences. Their neoliberal model slashed the public sector, undertook mass privatizations, restricted workers' rights and labor laws and opened up Chile's economy to foreign markets. In the words of Winn, the neoliberalism imposed during the Pinochet regime was a "highly ideological version," and a "vehicle for an aggressive attack on Chile's workers and the labor rights they had acquired during decades of struggle," and he notes the loss of labor rights, the stagnation in real wages and the maldistribution of income as a legacy of the Pinochet dictatorship.[11]

The phrase "the miracle of Chile" is, thus, a highly contentious expression, which glosses over both the shocking human rights abuses, state-sponsored murder, torture and forced disappearances of the Pinochet regime *and* the longer-term effects on the Chilean people, including widening inequality, labor insecurity and a reduced public sector. It is, thus, highly significant that Miranda Zúñiga and Olmstead choose this term for the title of their work, and, even more so, that they note that their aim is to "interrogate it, disrupt it, wrest control of its meaning from its makers."[12] This project is, thus, about disrupting the phrase and questioning it, rather than endorsing it.

They go on to explain that they created three main elements to "trouble" this doctrine, these being: a labyrinth which was overlaid by photographs that were generated at workshops; bricks with computer boards, used on the streets; and the re-writing of public space on buses.

5. Ricardo Miranda Zúñiga and Kurt Olmstead, "About," *The Miracle of Chile*, 2010, http://miracleofchile.com/about.php.
6. Ibid.
7. Patricio Silva, "Technocrats and Politics in Chile: From the Chicago Boys to the CIEPLAN Monks," *Journal of Latin American Studies* 23.2 (1991): 390.
8. For more on their role, see Carlos Huneeus, "Technocrats and Politicians in an Authoritarian Regime," *Journal of Latin American Studies* 32 (2000): 461-501.
9. Silva, "Technocrats and Politics in Chile," 393, 395. Silva is here making reference to Gramsci's concept of the organic intellectual, this being the member of a hegemonic class whose role is to formulate and spread the ideologies of that class; see Antonio Gramsci, *Selections from the Prison Notebooks* (New York: International Publishers, 1971).
10. Orlando Letelier, "Economic 'Freedom's' Awful Toll: The 'Chicago Boys' in Chile," *Review of Radical Political Economics* 8.3 (1976): 46.
11. Peter Winn, ed., *Victims of the Chilean Miracle: Workers and Neoliberalism in the Pinochet Era*, 1972-2002, (Duke University Press, 2004), 3-4.
12. Miranda Zúñiga and Olmstead, "About."

Regarding the first of these, the interactive game takes the form of a labyrinth in which the spectator-player is invited to negotiate, and is based on a workshop undertaken with children, who were asked to document what the phrase "the miracle of Chile" meant to them. The images that they captured were then fed into this maze. Miranda Zúñiga and Olmstead explain that their aim during the workshop was to question the meaning of the phrase "miracle of Chile" which had widely been seen as embodying the triumph of neoliberalism. Participants in the workshop were given a brief talk about economics, followed by a discussion, and then asked to walk through the city and document their understanding of what the phrase "Miracle of Chile" meant. As Miranda Zúñiga says, "The goal was to capture a sense of how ideology inscribes itself into the public space."[13]

Their practice here can be understood through theorizations of Debord and other Situationists regarding urban space. Debord's proposed "psychogeographical" method aimed to expose "the precise laws and specific effects of the geographical environment,"[14] and was inspired by Marxist thought, aiming to resist established meanings of urban space, particularly as these were regulated by capitalism, or, in the words of Hancox, "combat[ting] the alienating effects of the city's compartmentalization into zones that facilitated capitalist productivity."[15] In this way, the actions of the participants of *Miracle of Chile*, in their dérive around the city, documenting its spaces, can be seen as a type of neo-situationist approach for late capitalism, as they attempt to uncover the ideology that has been inscribed into public space.

Following the walk, participants returned to upload their images to the project's Flickr account, which were then used to populate the virtual labyrinth. In this way, as players when we negotiate the labyrinth, we, too, are negotiating and uncovering the ideology of the city space, with Santiago as the embodiment of neoliberalism. What immediately becomes obvious from these images are the stark contrasts that emerge between the phrase "miracle of Chile" and the images that have been captured. For in these images, this is not the Santiago of the finance district—which would be emblematic of the "success" of the purported miracle—but in fact side-streets and run-down areas of the city, as we see dilapidated buildings, rusting equipment in children's play parks, dogs behind railings with the paint peeling off and so forth. Whilst there are too many images to mention each of them, it is worth noting, for instance, one of a disused shop front, daubed with graffiti, with the slogan "Para que nunca más" running across the top and photographs pinned up across the window (see Image 1.2.1). The phrase is immediately recognizable as a reference to the Pinochet dictatorship, with "nunca más" being a highly-charged slogan representative of the investigation into the human rights abuses of the Pinochet regime.[16] The photographic images, whilst we cannot see the full details at this resolution, must therefore be of the disappeared, and indeed, the format of the photographs—the classic head-and-shoulders ID shot—is emblematic of the human rights protests calling for the truth of what happened to the disappeared. This image, therefore, makes reference to the stark reality of the purported "miracle of Chile," namely: to the state-sponsored imprisonment, torture and murder of thousands of Chilean citizens during the Pinochet regime.[17]

If this image in the labyrinth makes us question the prior regime under which the "miracle" of Chile was implemented, other images encourage us to question the contemporary conditions of neoliberal

13. Ricardo Miranda Zúñiga and Kurt Olmstead, "Workshop," *The Miracle of Chile*, 2010,http://miracleofchile.com/workshop.php.
14. Guy Debord, "Introduction to a Critique of Urban Geography," in *Situationist International Anthology*, ed. Ken Knabb (Bureau of Public Secrets, 1995), 3.
15. Simone Hancox, "Contemporary Walking Practices and the Situationist International: The Politics of Perambulating the Boundaries Between Art and Life," *Contemporary Theatre Review* 22.2 (2012): 237.
16. See the use of the term "Nunca más" as the title of the 1999 summary version of the Rettig report (see Comisión Chilena de Derechos Humanos), and also its use by Ricardo Lagos in his prologue to the 2005 Valech report.
17. While, due to the clandestine nature of the arrests and the torture centers, exact figures are hard to gain, the Valech Commission documented over 27,000 victims (Comisión Nacional sobre Prisión Política y Tortura 2005).

Image 1.2.1. The Miracle of Chile, 2010 (detail).

Chile. This is the case, for instance, of a photographic image of a scrap material merchant, who pushes his handcart along the sidewalk, loaded with cardboard, bags of garbage and other refuse (see Image 1.2.2). The presence of the scrap merchant can be read as emblematic of the longer-term consequences of neoliberalism, and the growing inequalities of the city.

As we navigate through these images, we thus we uncover the underside of the city, or, to use Debord's term, we see what lies beneath the "spectacle" of the city.[18] Our navigation of these images enables to understand both how the "economic miracle" was undertaken during a brutally repressive dictatorship with complete disregard for human rights and, furthermore, how it created, and continues to create, the "uneven geography" of late capitalism.[19]

The second element of this work—the street interaction—involved the creation of an object consisting of electronic circuits mounted onto broken street tiles from the city of Santiago. The tiles with the circuits were placed onto the pavement with a set of instructions for interested pedestrians who were then encouraged to find another passer-by, ask them the question posed—what the Miracle of Chile is—and then pass the object on.

18. Guy Debord, *The Society of the Spectacle*, trans. Donald Nicholson-Smith (Zone Books, 1994), 29.
19. Manuel Castells, *End of Millennium* (Blackwell, 2010), 73.

Image 1.2.2. The Miracle of Chile, 2010 (detail).

In this part of the work, Miranda Zúñiga and Olmstead are playing with the notion of the brick or the "ladrillo," and its multiple meanings. On the one hand, their tactic of taking up a broken piece of the street paving is a deliberate attempt to engage with the fabric of the cityspace, and furthers their aim of interrogating the ideology of the city. On the other hand, as well as referring to the literal paving stone, the term "ladrillo" is immediately recognizable in a Chilean context as the term given to the 500-page document created by the Chicago Boys, which set out Friedman and his teaching as a "remedy" to Chile's economic problems.[20] Dubbed "el ladrillo" due to its huge size, the document prescribed privatization, deregulation, cuts to social programs, and was central to the implementation of neoliberalism under Pinochet. In this part of the project, then, the artists combine the multiple meanings of "ladrillo," and in so doing closely tie the cityspace to ideology.

20. The document has since been made available through the Centro de Estudios Públicos; see Centro de Estudios Públicos (1992).

The third element of the project involved a tactic of re-writing public space on buses. In this part of the project, the artists used the advertising spaces that are inserted into the straps that passengers hold on the buses to interrogate the "miracle of Chile." In so doing, they disrupt the uses of these spaces in two ways. Firstly, they take up a space conceived of for advertising—and so, promoting products and the ideology of capitalism—but do so in order to encourage the passengers to question capitalism, rather than comply with it by buying new products and being seduced by commodity fetishism. Secondly, the disruption also comes about in relation to the geographical spaces that are traversed by the bus. For, the bus line that was selected for this part of the project is that which leads from the wealthy business district of Santiago to one of the most impoverished neighborhoods of the city, La Victoria. This is a deliberate tactic to draw attention to the spaces of uneven development of late capitalism. As Castells and others have argued, the process of capitalist restructuring under neoliberalism has resulted in an "extremely uneven geography of social/territorial exclusion and inclusion," resulting in a "new geography of social exclusion" which is visible in every country, and every city, around the globe.[21] The structural inequalities of late capitalism thus create what Christian Fuchs has called "segmented spaces" (Fuchs 2008: 94), in which these inequalities are visible in the very spaces of the city itself. Travelling along this bus line, then, is a process of witnessing the "two Santiagos" and "two Chiles"[22] which subtend the "miracle of Chile," and of understanding the living conditions of the millions of Chilean workers whose long hours, poor pay and precarious living conditions have made the "miracle" possible.

One example of the type of intervention that was inserted into these advertising spaces is the following (see Image 1.2.3):

Image 1.2.3. The Miracle of Chile, 2010 (detail).

21. Castells, *End of Millennium*, 73.
22. Winn, *Victims of the Chilean Miracle*, 1-4.

Using bright, contrasting colors, this mock advertisement displays a grimacing, deliberately cartoonesque Friedman in the bottom left corner; such a cartoon reworking of images is common to Miranda Zúñiga's aesthetic in many of his works. Here, we can see the way in which the work plays with the notion of "estar en tus manos" [to be in your hands]: the strap we hold as we ride the bus is indeed, literally in our hands, but we are also encouraged to reflect upon how the economy may be in our hands in a figurative way: how the purported economic miracle is due to the hard work of millions of working class laborers – known as "mano de obra" in Spanish. As a whole, then, *Miracle of Chile* interrogates Milton Friedman's famous assertions regarding the "economic miracle" of Chile as representing the purported success of the neoliberal, free-market model, and the work encourages participants to question this model.

If the above example is of a game art project that contests the uneven spaces of neoliberalism which, albeit influenced by global economic theories, was implemented largely within the same country, the next example under analysis in this chapter demonstrates how these uneven spaces transcend nation-state borders. This is the case with Miranda Zúñiga's *A Geography of Being: una geografía de ser* (2012), an interactive installation consisting of a video game along with sculptures that contain electronic circuits that react to the game, which was exhibited at the New York Hall of Science in 2012 as part of the *ReGeneration* exhibition.

In a similar fashion to *Miracle of Chile*, which encouraged us to resist rather than comply with the ideologies of the city space, *A Geography of Being* is a resistant game that, far from drawing the user into a purely ludic, pleasurable world, encourages him or her to reflect on social issues. The game narrates the experiences of undocumented young immigrants in the U.S., and is based on interviews that the artist undertook with two young men who immigrated to the U.S. as young children.

The experiences of these two interviewees—one from Latin America, the other from Asia—influence the narrative and the visuals of the game, and, significantly represent key points of U.S. domestic and foreign policy. As regards the Latin American context, the experience narrated in the game makes reference to the growing numbers of Mexican, Central American and other Latin American migrants attempting to enter the U.S. The rise in these numbers is due to a number of factors, including fleeing pervasive violence, persecution and extreme poverty, with some describing them as "de facto refugees, not illegal border crossers."[23]

One particular driver in the numbers of undocumented migrants attempting to cross the border has been the neoliberalization of the Mexican economy, with the 1994 implementation of NAFTA as a defining moment; Rosas, for instance, has described NAFTA and the accompanying structural transformations in Mexico as marking "the consolidation of neoliberalism in Mexico."[24] NAFTA ensured the U.S. access to an abundant supply of cheap labor south of the border, and has long been the subject of criticism by Mexican activists for its devastation of the traditional Mexican rural economy.[25]

One of the effects of NAFTA was the creation of a dispossessed underclass; as Valdes and others have argued, NAFTA resulted in the creation of "a newly dispossessed class of agricultural workers, many of whom were compelled to migrate to the United States."[26] In this way, the implementation of

23. Robert Warren and Donald Kerwin, "The 2,000 Mile Wall in Search of a Purpose: Since 2007 Visa Overstays have Outnumbered Undocumented Border Crossers by Half a Million," *Journal on Migration and Human Security* 5.1 (2017): 125.
24. Gilberto Rosas, *Barrio Libre: Criminalizing States and Delinquent Refusals of the New Frontier* (Duke University Press, 2012), 50.
25. See, for instance, Irma Lorena Acosta Reveles, "Fifteen Years of NAFTA: The Impact on Rural Mexico," in *Social Change, Resistance, and Social Practices*, eds. Richard A. Dello Buono and David Fasenfest (Brill, 2010.), 93-102.

neoliberal policies that devastated the Mexican rural economy was one of the contributing factors to the waves of migration from Mexico and Central American countries to the U.S.

The game positions the player in the role of one of these undocumented youths, and s/he needs to negotiate the game and learns about the hardships that these young people face. Visually, the game is very striking, with bold outlines, bright colors and collage-like images (see Image 1.2.4). The visual references within the game are taken from the experiences of these undocumented youth, and represent both their homeland they have come from, and their trials and tribulations in the U.S.

Image 1.2.4. Screen capture of A Geography of Being: una geografía de ser, 2012.

Our avatar is a young male, dressed in black, whom we need to move through the gameworld via a limited number of movements using the arrow keys and the space bar of our keyboard. No instructions are provided to us, and we have to navigate our way through, and work out how to navigate the gameworld as we go along—much as the undocumented migrants must learn to understand and navigate their new environments.

The backdrop to the game in the first level contains a number of cultural references to Latin America, including indigenous figures who fought against the colonizing Spanish, or the colonial cathedral in the city of Granada, Nicaragua. Subsequently, in the second level of the game we are located within a complex system of cogs, with each cog containing an image of a manual worker, such as a delivery man or cook. If we fail to jump successfully from one cog to another, we get crushed between the cogs; in this level, we are trapped within the system, and must frantically negotiate our way out. The

26. Dennis N. Valdes, "Legal Status and the Struggles of Farmworkers in West Texas and New Mexico, 1942-1993," *Latin American Perspectives* 22.1 (1995): 128.

third level of the game locates us in an underworld beneath the streets of New York, in which we must avoid certain hazards in order to progress upwards towards the surface.

The game narrative, running throughout these three levels, is, broadly speaking, one of assimilation, as we move from our cultural homeland to try to survive in New York. Yet a particular feature is the sound in the game, which encourages us to critique rather than comply with the notion of ludic/narrative progression that the gameworld implies. For the sound in the game, rather than being diegetic sounds of the gameworld, is an extended extra-diegetic sound, which runs over the game introduction and the game itself. These sounds comprise excerpts from the interviews, as well as comments from activist and community groups; these tell us about the difficulties faced by undocumented migrants. In this way, the sound disrupts the gameworld, and does not allow us to get caught up in the game world; instead, we are encouraged to critique it. Given that the game largely about progression (and its associated sense of assimilation) we are encouraged to critique, rather than comply with, this concept.

In addition to the gameplay itself, another highly important features of the installation is the presence of the wooden sculptures that accompany the video game, and take the form of three humanoid figures: a mother, a father and a child. Each sculpture, approximately half a meter in height, contains within it an animated display that is shown on a small screen installed in their midriff and connects to the video game (see Image 1.2.5). These robots react to the game as it is being played, and can provide the eagle-eyed player with shortcuts to help them through the game levels.

The provocative name given to these robots by Miranda Zúñiga is "Undocumented Drones"—a reference both to the status of these young men as undocumented, and to the increasing use of drones by U.S. forces in zones around the globe. Here, Miranda Zúñiga's use of the term makes reference to the geopolitical realities that underpin the waves of migration that his work represents. Re-semanticizing the term "drone," Miranda Zúñiga provides a critique of the use of drones in U.S. national and foreign policy, both in their use in policing the U.S.-Mexico border, and in policing the virtual borders of the U.S. elsewhere around the globe. Regarding firstly the U.S.-Mexico border, the drone has become a key component of the so-called "virtual wall"; the complex system in which drones are employed, along with sensors, cameras and other equipment to police the border, track migrants and arrest them.[27]

But the drone has not just been used to police this particular border space; its use in a variety of conflicts around the globe has meant that it has become emblematic of U.S. foreign policy, and, in particular of U.S. attempts to protect its (imagined, extended) borders. Here, I draw on Feldman's arguments regarding the U.S. homeland security state as creating "a cartography of open-ended counterinsurgency in West and Central Asia."[28] Viewing this as a "resuscitation of frontier violence," Feldman argues that the contemporary U.S. homeland security state engages in "practices of 'ubiquitous bordering' at a variety of local, regional and transnational scales," and that, following Kaplan, "the ideological function of the term 'homeland security' itself is meant to legitimate these practices by suturing the intra-national contraction of proper spaces and subjects of the political with the transnational expansion of U.S. imperial sovereignty." The notion of homeland security, thus attempts to "stabilize, make legible, and manage the ineluctable plurality of a population," and, at the same time, "the extension of bordering processes outside the geography of the nation-state creates

27. For analysis of other game art or "didactic game" projects that engage with and critique the drone as telepresent technology in modern warfare, see Jenna Ann Altomonte's chapter in this volume, "Didactic Gaming Online: Joseph DeLappe's Killbox."
28. Keith P. Feldman, "Empire's Verticality: The Af/Pak Frontier, Visual Culture, and Racialization from Above," *Comparative American Studies* 9.4 (2011): 326.

Image 1.2.5. A Geography of Being: una geografía de ser, 2012 (installation detail).

flexible biopolitical zones capable of traversing the globe, in which certain subjects [...] are invited to occupy categories of life and wield power over the lives of others, while others are banished from sociality to the point of death."[29]

I argue that the way in which the term "drone" is used in Miranda Zúñiga's work is an attempt to lay bare, and to critique, the structures underlying these technologies. If drones are symptomatic of the flexible borders of "homeland security," then the fact that Miranda Zúñiga turns them on their head, encourages us to critique this. This is done firstly through their nomenclature where, in place of the standard terminology, in which "drone" is taken to mean "un*manned* aircraft," these are now un*documented* drones (my emphasis), with the drones representing not the forces of law, but the experience of the undocumented migrant. In addition to this, the physical manifestation of the drones is a further way in which the trope of the drone is troubled.

Now, in this game, the drones are humanoid figures and indeed, according to Miranda Zúñiga, are intended to "represent the traditional nuclear families: father, mother, the sibling. If people

29. Ibid., 327-328.

cannot figure out the game they can talk with the figures—this is like talking with families who help them through their lives and tell them about reality."[30] The drones in Miranda Zúñiga's game, then, are no longer the external surveillance system enacting U.S. homeland security policy, but fellow undocumented migrants whose presence is essential for survival. In this way, the technologically-enhanced surveillance system offered by the conventional drone is now replaced with a technologically-enhanced helping hand—helping the migrant in his/her experience, and helping us as player by means of the shortcuts through the game. In summary, the drone is a reference to both to the increasing militarization of the border *and* a reference to U.S. foreign policy and intervention in other areas of the globe, yet Miranda Zúñiga's tactic is to question the semantics of the drone and the power structures that it represents.

In conclusion, this article has analyzed two different works by Miranda Zúñiga which employ gaming techniques as part of their strategy. Both combine online and digital space with offline, concrete place, in their different ways, and both involve questioning dominant ideologies. Through their combination of audience and street interaction with digital and online games, *Miracle of Chile* and *A Geography of Being* aim for maximum audience engagement, and encourage the player to question the rules of the system in which they are playing.

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