

Reality bytes. Hybrid inter-faces, hybrid selves

Mario Lopez

Kyoto University

Abstract. Over the past 20 years, computer games have become a very integral part of consumptive practices, acting as a guide to mediate multiple selves. This sets the context for this paper, a philosophical inquiry into the *creation* and *mediation* of 'selves' through the consumption of Japanese computer games, taking a detailed look at some of the symbolic and semiotic structures that permeate game structures. Games placed in the realm of human creativity and normative freedoms are as argued in this paper, a subtle form of the Deleuzian concept of *assemblage*.

This paper argues that the 'self' as seen through computer games manifest multiple 'selves' that highlight the fluidity of identities which are being fabricated, disseminated and transmitted from Japan. Through an analysis of a number of Japanese games popular in Japan and actively consumed abroad, this paper examines an underlying grammar that transcribes the self and how social relations are reworked through technological enquiry. This paper further highlights how computer-dominated social practices that have heavily flowed from Japan have introduced very specific ontological ways of seeing the world to a whole generation of games players residing in other geographical spheres.

Introduction

To set the context of this paper it is necessary to step back to the year 2000. At the end of August 2000, Nintendo entered into the games market with all the fanfare and hype that only a multi-national can muster with the release of its then flagship machine, the Game Cube. Legions of fans and industry reporters awaited any morsel of information they could find. The official line released from Nintendo was this.

We have been creating a world in which the player can enjoy the feeling of actually touching the 'world' created by the software ... the player can benefit by building a bond with the game and the characters in it. The Nintendo Gamecube will carry on the 'DNA' of Nintendo Games and give birth to a new kind of entertainment that surpasses existing concepts of what great gaming is (Nintendo Press release 1999).

The ubiquitous viral capacity of the internet disseminated this message, impregnating users with the power in this machine. One promotional movie from Nintendo showed the potential within the machine with a display of their emblematic flagship character, Mario. Mario literally fragments and dissolves into hundreds who

go scurrying around the screen. Yet, paradoxically, what appears to be the random fragmentation of this digital avatar is controlled code, programmed to *act* randomly. Hundreds of these shards of a purposefully broken image re-coalesce through code. What seems to be random spontaneity is machinically brought under control through the subversion of the code that *powers* the imaginational outpourings into the fragmentation and re-integration of these lines of code.

This propagation is what Deleuze and Guattari have remarked as being the process of *assembly* and *disassembly*. Assemblages are, as Deleuze and Guattari have theorized, the discovery of territories and the subsequent creation of rules and discourses which will govern their usage. In this paper, the concept of assemblage is central to understanding how games, expressed through technology, are an *extraction* of *milieus* (cultural environments) from territories. Deleuze and Guattari have made a compelling philosophical argument to show how within territories, assemblages create spaces from decoded fragments (Deleuze and Guattari 1987). These fragments are of interest to this paper as they form a cultural composition that tries to make sense of the world, give it shape and form from within the realm of the human imagination. As will be shown, these fragments borrowed from milieus inform the content and expression of articulations, which results in a regime of signs. This regime of signs signifies a vast body of social relations, expressing new cultural explorations of technological selves. These expressions are all the more complicated by global interactions. Here, in newly discovered spaces more than just a machine's capacity is displayed. The assemblage is a machine and its subsequent code, as Nintendo has metaphorically announced, *propagate* its 'DNA' and seed it in the player/user. The player has the capacity to fragment, as well as assume the mantle of a myriad of characters, a multiplicity of constructed realities. This multiplicity also informs the context of this paper. At issue in today's machines are 'us'. Relationships between society and culture are being radically mediated through technology which we develop for our entertainment and for our 'selves'. The interest of this paper lies in asking how other concepts of the self are encoded for cultural consumption in other spheres. This question is especially salient when these concepts are part of the culturally imaginative flows spilling out of Japan, a highly industrialized nation which supplies the world's markets with globally mixed products.

New concepts of the self do not only find themselves within games but also within the architectures and platforms that support them. When released, Sony's Playstation 2 had a trumpeted built-in emotion chip whose sales line was that it makes users *empathise* with their experiences, makes them *feel responsible* for their actions, in effect bonding the player, hardware and software. This emotion engine was, as Ken Kutaragi, the then president and CEO of Sony announced, 'a great innovation

in architecture ... the new emotion engine due for future Playstations will be two manufacturing generations beyond today's chips' (Kutargi as reported by Kanellos and Davis 1999). In a previous statement, he also stated that 'the Playstation 2 is charting a *path* towards the *future of networked* digital entertainment' (Fried 2000: emphasis mine). I am interested in the terminologies employed here, since the insinuation is that we are bonding with machinic technologies in ways unprecedented in the technological revolutions of post-Fordist economies in hyper-developed economies.

This paper philosophically deals with how, through Japanese videogames, a redefinition of the self may be underway through technological innovation and how this is being propagated through the technological discourses that are taking root in us. Computer games created in one of the world's largest economies and disseminated and spread through logistic viral networks have become a staple in the hyper-developed nation's consumption of the self/selves. Over the past 20 years, computer games in the West and for the focus of this paper, Japan, have been a fertile, imaginative ground for bringing forth 'worlds apart from worlds' that have spilt out of their original casings and are now framed in and disseminated through new technologies. This paper is also located within the language of Deleuze and Guattari and borrows their concept of the creation, formation and negotiation of pathways: fundamental structures that exist in most of today's games which heavily embed capital relations into code.

Games are now a heavily studied area which yields a range of interesting information on the techno-human interface. As shown in other studies, when children started to rationalize the ghosts within the casings of first generation computers using psychological discourses (Turkle 1984; Turkle 1998; Ito 1998; Gergen 1996) and when objects started to become signifiers of our relations with them (Csikszentmihalyi 1992), it is possible to ask the following question. If videogames as objects start to interact with us in multiple ways and offer us worlds to explore, does the self undergo a redefinition, fragmenting *a-la-Mario* into a multiplicity of self through the consumption of technology? This restructuring of the self is the key question of this paper. Technological changes, as I see it, reside in a wider network of referents that computer games lie within: the economic, technological, social and cultural realms of human life. What I will attempt to do here is decipher the underlying processes and scripts that confer life to these machines and their structures.

Encounters with our 'selves'

Videogames as objects that we interact with are relationships between individuals/people and those artefacts that are construed as useful. They are non-material (immaterial) products in so far as they are constructed as being good to represent

our relationships with others and as an expression of the self, and its place in society. These objects have also increasingly become incredibly lively, animate constructions of alter realities that link users across space and time instantaneously (collapsing both these categories simultaneously). These objects have been given the initiative to ‘think’ for their them‘elves’. It is here where I feel that they start to redefine the notion of ‘self’.

Through their relationship with objects, people define their positions vis-à-vis others who participate in forms of consumptive practice such as interaction with computer games. Yet how do we behave when dealing with objects such as the display from Nintendo that are cultural creations and that show a tendency to regulate themselves? Or as previously mentioned with Sony’s discursive thrust at making us believe a machine can be emotional? The argument that we are reconfiguring notions of the self seems to take on salience when analyzed through objects that we allow to *regulate* themselves. By regulation I refer to objects that reside within an object (the game), in this case a coded, constructed computer game which is programmed for self-regulation. Coded structures endow life to these objects (i.e. coded objects that interact with the user, but reside outside of their control), which are supported by discursive practices that locate games and the technology in forms easily digestible in the public domain. Programming techniques allow for off-screen activities to occur concurrently in real time, reactions affecting and being affected by the player’s decisions and the game’s programmed array of responses to set situations. In this sense, as an example, the so-called Emotion Chip in the Playstation is cast as the gateway that in the Heideggerian sense challenges forth our interaction, creating a relationship of unlocking, transforming, storing, distributing and switching, within limited, constructed realms—but always realms created by the human mind. Without a visible mechanism that allowed for past generations to conceptualize machinery and technology as Piaget highlighted early in the 20th century (Piaget 1971), there is a reconfiguring of the traditional perception of the underlying structures that guide the hand of craftsmen that fabricate technologies.¹

Whereas in the traditional Western acknowledgement of the ‘self’ there is a Cartesian split between *knowledge* and *cogito* in which dualisms normalized themselves, the distinction has become very blurred and dubious as our perception of our ‘selves’ changes in time and space. ‘I think therefore I am’ is the self-awareness that occurs when the self becomes the object of reflection, that is, the self takes itself as its

¹ There has been a great shift from Fordist mechanical structures to post-Fordist production in the last 20 years. This is evident in the structures of games that demand material labour through active consumption of an object and in games themselves that are constructed by immaterial labour, making the divide in real-time between labour and non-labour extremely blurred.

own object from a Cartesian perspective. Yet, this dualism is vague in the context of games which come from geographical regions where the self is more relational. This relationality when understood in a Japanese context has been described as a particular configuration of power whereby the different strands of the self ‘strain and tug’ at each other and where ‘cleavages’ exist instead of a coherent whole (Kondo 1986). What this implies is that the notion of a coherent self may be juxtaposed by a more fluid version which fulfils socially and culturally different roles vis-à-vis other social actors in time and space. In a Japanese context, ‘a key component of constructing the self involves the continual affirmation of the relationships of which the individual is part and thus an affirmation of the self as an active, mutually validating, and validated cultural agent’ (Heine, Lehman, Markus, Kitayama 1999, 767). Yet, it is the ‘cleavages’ as mentioned previously that are of interest here. To put this comment in context, consider one game produced by Nintendo, *Zelda the Ocarina of Time*. This game places the user in control of the protagonist Zelda, who jumps backwards and forwards through time and space (both are collapsed and confused). Here the cleavage is all too clear in how outdated some of these dualisms are. Zelda leaps from childhood to adulthood on completion of the first half of this marathon game. Zelda (he/she/it, the distinction is also visually unclear, possibly to entice both male and female players) moves to adolescence in the space of seconds. With a puzzled, perplexed look, Zelda raises its arms in dismay and amazement. Paradoxically, it may appear that Zelda, who straddles two worlds, shifting between both depending upon the tasks to be completed, is living out dualisms. In this assemblage of time and space, which is collapsed, distorted and woven into a leap that can be crossed whimsically, who is showing amazement: your human self or your digital avatar? The jump to multiplicity begins here, for Zelda can be many within one. Yet, the construction of the self is not just the affirmation of relationships, but has now, through technology, become a mediation through time and space, through interaction with objects *within* the object as an expression of the relationality of the self. It is here where Deleuze/Guattari’s concept of assemblages provides a key to understanding within what framework and according to what rules the self finds expression. Games are a part of a regime of signs, a pragmatic system where expression in an assemblage (the multiplicity of a constructed self laid bare to the user) becomes an enunciation of a certain crisis identified through technology. Is it really just a dual split, or is there more to this assemblage?

If we locate the above in Deleuzian terms, we cannot speak of a ‘dualism between two kinds of “things” but of multiplicity of dimensions, of lines and directions in the here of an assemblage’ (Gatens 1996, 167). As such, our body, now made up of other bodies, is part of an assemblage that extends *from*, as well as *into*, the game. This is a kind of Heideggerian ‘revealing’, and ‘bringing-forth’ (Heidegger 1977)

where our self becomes multiple, on a plane that underscores the social experience of being human. We become dynamic and interconnected, only distinguishable from others by our amorphous selves that constantly interact with the game's manifestation of multiplicity, in opposition to a Cartesian automaton, a complete holistic body with one entity. Again, to return to the role of assemblage, we can see here shifts in representing the technological self as no longer subordinated to a dualist split, but as an ongoing reconstruction of a more fluid multiple self.

As seen with the example from *Zelda*, games perform as a way of creating goal-orientated paths that blur boundaries. Yet is there a real self if we find that multiple selves are coming to the fore? There is no one self, as this is in turn mediated by and learned through our cultures. But if our cultures are at once becoming technologically fluid, we may find that we are defining the usefulness of ourselves in relation to the objects which we interact and fixate upon. Csikszentmihalyi points out that this fixation or attention as a 'finite' source only allows us to focus on a few bits of information at any given time (Csikszentmihalyi 1992). But does this hold true for computer games when the user has to manipulate on many visible and invisible levels: cultural, social and spatial references? And, it especially interesting to know the influence of Japanese cultural products coded for consumption in other spheres. When the ordering of information occurs through social systems and shared, networked interaction on a global scale, what happens to these networks of play? Inevitably, a lot of information is assimilated simultaneously and across many different levels. One of these levels which requires attention is pathway mediation as a unique goal, which can at times render environments superfluous.

With pathway mediation and orientation, the fixation and bonding between user and game is intense as all the different levels of concurrent interaction are explored and negotiated. On the completion of levels or tasks or achievement of goals, users have positive feedback for the time invested in cultivating their computer selves. Yet, to what extent does this lead to other areas of their lives being under-cultivated/ cultivated, when so much time is spent learning these processes, opening up pathways within the game to multiple 'selves'? It is these 'pathways' that structure games, and their imprint, sometimes visible, that is mainly interred in the social and cultural code that is implemented.

Crafting 'selves', pathway orientation, and goal creation

The human-machinic interface is an integral part of our lives. Over the past 20 years, we have grown up around computers with games that are lively *in-animate* objects.

Yet, they are now placed in nearly similar categories of human spheres of activity that use discourses which are appropriate for living things (Latour 1997; Strathern 1999; Turkle 1984 and 1998).

The computer game, in part an extension of the structures of technology that invest it with its *potential*, becomes a qualified tool to define a means-end relationship. These structures are socially, culturally, and technologically created in public and private realms, and they have manifested themselves in spaces of appearance. *Potential power* arises in the public realm, in spaces of appearance, where people converse in acts and speech. But to what realm do the objectives of modern technology created by *homo faber* belong to? Games brought into being, etched onto the roadways of circuitry and the zealous penetration of inner space, should be questioned in terms of the usefulness of the relations that they allow us to form with them. To borrow the words of Arendt, as instruments, these games are brought into being and 'designed by *homo faber* for the erection of a world of things' (Arendt 1989, 144). Yet what worlds are erected in these internal inner spaces? What creative imagined outpourings are breathed into life through cultural musings given form as games?

The transnational flow and experimentation of new technologies in the late 1970s not only opened up new cultural markets, but also led to the founding and consumption of non-Western markets. In Japan, the flow of games ideas from Europe and the U.S. were re-invented, creating methodologically designed games which often required players to memorize completely different terminologies specific to computer systems. The 'revealing' potential in public realms created through the unlocking of inner space through technological innovation and their subsequent structural architectures defined parameters to work *within*, as the plethora of systems that arose at the time testified. Users adapted to and adjusted their interactions according to the terminologies. Users adapted to the *conditions of play*.

These conditions of play can be interpreted as being one of the underlying structures of computer games and the imaginative intentions of programmers in codifying the human condition. Existence is contingent, yet the cultural dreams of how societies should be rendered come to the fore in games, in the pathways that represent their ontologies and epistemologies. Games that have penetrated the home reside within these metaphors of pathways created for their orientation. Within the space of a game, mastery is at stake for players and users and it is here that mastery and control are seen as specific issues in the development of the individual within society. Discourses that resonate from outside of the game do politicize them, for with mastery comes autonomy, the key to growth, place and ranking.

To emphasize the above context, we need to delve deeper into the games themselves. Games such as the mini-worlds of *Super Mario*, *Zelda* (Nintendo), or *Final Fantasy*

(Squaresoft) all take on the RPG (role playing game) format and are populated by the hubris of reality with structures that inform, delineate and codify with their simulacra of reality. In particular what binds these three series is the narrative of freedom to explore vast, expansive space, yet with a structured linear progression. It would be easy to suggest that these discourses offer a respite from the constrictors placed upon the self in Japanese society. They are, however, rooted in everyday discursive realities which are tied to the way in which *narrative structures* have been created and projected out into Japanese society and as a way for people to gain access to a 'grand narrative' for defining selves. This is strongly argued by the cultural critic Eiji Ohtsuka, who puts forward the argument that it is not products themselves (software or other culturally inferred objects that inhabit them) that are consumed per se. Rather it is the products as individual parts carried within a 'grand narrative' that exists within the background of their *order* (Ohtsuka 1989). It is only within the parameters of a larger referential narrative that cultural objects—in this respect games—are accorded value and then consumed. Azuma Hiroki furthers this argument in the context of *Otaku* by stating that it is through the duplication of framed consumptive behaviour that Japanese consumers can live out their dreams within the order of a 'grand narrative', creating and consuming selves (Azuma 2001). Thus, people define themselves in terms of the spaces generated within the games structure, as much as they reflect factors outside of them (the grand narrative supplanting ideology). Within the above context, the ability to master and enjoy mediums and environments that structures generate to interact with are seen in positive terms. Looking through the genealogy of computer games, beat-em-up's (2-D/3-D fighting games), scrolling shoot-em-ups (forward linear progression up a screen against an infinite hoard of enemies), and RPGs (role playing games such as the ever popular *Dragon's Quest* and *Final Fantasy* series), pathway guidance and structuring is a key to understanding the underlying structure—and the larger narrative framework—that the game lies on. Society, culture, and their technological innovations merge to impose structures that, although invisible, foreground user authority and the social experiences they bring to bear upon the game. There is the perception that the player is in control, but the underlying logic of the game consciously (if not visually) coaxes the player through a set of spaces towards (what is for the program/programmers) the logical conclusions that rest in the code.

Yet, these spaces can and are subverted with the appropriate knowledge. Parameters can be set; elements in the matrix of permutation and configuration consist for the constant testing of boundaries, probing the edges of the program, testing the limits of the technology and our relationships with it. We form relationships with our machines as they become the mediatory focus point for the interface that gives

way to domination, ranking, unlocking secrets, and maximizing potential. These principles, the fundamental structure of many games, are what Turkle has described as 'computer holding power' (Turkle 1984). It is with this that at the heart of most modern videogames lies the idea of constructed 'rules-governed worlds'.

The 'rules governed world' offers an experience that can be actively participated in: it is to be entered, something that to a certain extent can be negotiated, allowing users 'full depth' inclusion into worlds of *difference*. These programmed microcosms offer varying degrees of freedom. Through interaction with a dynamic screen displaying an environment of limited scope, information about structures and strategies can be pulled up, pulled down, displayed, and disinterred by selecting buttons. Translucent windows and menus now the staple of most videogames point to a multilayered textuality that merges with visuality. This textual-visual environment allows the player to simultaneously become statistician, logistician, geographer, economist and adventurer. This leads the intellect, action and labour of the player to function as a unitary whole that is interchangeable and transferable between similar genres. Control interfaces, menu controls, special moves through joy pad commands, and timed movements 'chained' together to cross thresholds are absorbed and mastered to make the progression from solidity to fluidity and vice versa. These are pathways of control that etch themselves onto, within and outside the user, foregrounding their experiences where convergence across different planes and axes highlights the multiplicity that exists in games space.

Another example of these pathways can be found in *Dance Dance Revolution* (D.D.R), a Konami product which highlights some of the above strategies of learning and acquisition. Visual learning, like orality, is something that can be transmitted and passed down through human contact.

Yet, this time, transmission is across the human-machine interface. A basic series of movements is constantly at hand and patterns of character flow are learnt quickly in order to unlock the dynamic structure of the game that writes itself to the body. D.D.R. centres around the user aligning correct foot work to the tempo of the music on touch sensitive pads on the floor of the machine. This is negotiated by arrows that appear off the screen, in various directions that correspond to where the feet should go on the pad. The body matches the commands given by the machinic interface to align themselves with its structure. Correctly timed movements generate applause from the machine, propelling the user on into the structure of the game. Performance is linked to ranking with perfection achieved by intimately writing the code of the game onto the body. From blistering fat bass and acid techno music to J-Pop, players dazzle everyone with their acrobatic, seemingly impossible footwork, spinning in trance-like circles, break dancing in the confines of the space, constantly stringing up combinations to

propel them up the game ranking system. Some users do not even need to look at the screens since it has now become inscribed on their bodies: their attachment complete. Deciphering not only the game's logic, also but the programmers' intent, offers part of this challenge. The techniques that can be learnt from this environment are readily transferable to other coded environments. Games such as Namco's *Taiko no Tatsujin*, Konami's *Guitar Freaks*, and Sega's *Samba de Amigo* and *Shaka to Tanbarin* show how these hand-foot interface machines use everyday instruments such as the *taiko*, drums, sambas or the tambourine. These have become de-rigueur in arcades and the home, allowing game codes and structures to be tattooed onto the body.

As with other genres, these inscribing techniques have been transferable. With the *Virtual Fighter* series (Sega) that debuted in 1993, physical causality gradually emerged from these new structures. Although the display of physical causality was nothing new in games, *Virtual Fighter* succeeded in implementing the imitation of realistic human movement of the joints, knees smoothly flexing, chests moving in the simulation of aspiration. New generation games increasingly contain chained multi-layered, multi-player feedback oriented structures that employ sequential movements that have to be absorbed through the mastery of technique. By this I mean mastery of gamepad and button commands actuated in sequential order. These sequential structures, write themselves into our own internal bodily structures, expressed in the colourful, but destructive, tendencies of animated characters that slam into one another wave after wave. Yet for those that have transferable skills, it is a case of making the transition from one element to another, concentrating on the spaces and paths that exist in the structure foregrounding user authority. These structures are inter-changeable. Command sequences can be assembled and reassembled in new orders, permeably transferring across the machinic-human-interface divide. In another genre, the scrolling shoot-em-up, high level users do not look at what is going on nor concentrate on the action; they look at the spaces between the bullets, the dead spaces that inhabit all games.

To highlight the above, take *Radiant Silvergun* (Treasure 1998), a game that exemplifies this genre. Released towards the end of the shelf life of the Sega Saturn, this game was hailed for its pyrotechnic, visual displays of sheer processing power, being able to shift volumes of polygons and pixels around the screen. This game extracted from the Saturn all its possibilities for creative destruction. As an example of the shoot-em-up taken to its (il)logical extreme, a lone fighter faces an infinite horde of enemies (faceless, expendable and forgettable), and has at its command an infinite supply of ammunition with power ups at regular intervals. The scale of destruction that can be wrought by the player is beyond description, yet the underlying conceptual framework of this game comes to the fore, complete integration into an

ontological mode of destruction. In an age of nuclear weapons, destruction is not given any meaningful construction or description. This genre, although a branch in the genealogy of computer games, shares its traits with many other genres. The ancestors of this genre are mutating with the viral capacities of new generation machines, propelling it into the 21st century while feeding the imagination with the potentiality of destruction.

Within this genre, Konami's popular *Gradius* series (1985 to the present) has been updated at regular intervals. This series made the successful migration from the arcade to the home in the mid 1980s as the processing power of home consoles had gradually come to equal the potential of other technologies deployed in public spaces of engagement such as the game centre. It is important to note here, that an archaeology of gaming can disinter some very interesting ways of looking at how Japanese society incorporates other cultural influences into genres, technology and software. As the cultural critic Momu Toru asks through the metaphor of excavation, how this bricolage is interpreted and affects people's interactions with technology is a crucial question. Videogames are now buried 'in my day-to-day life' and as 'they diffuse and enter into our everyday lives then the excavation work will become even harder. It is for this reason that it is essential we re-examine the issue here and now' (Toru 2000, 26). Through an archaeology of games, we can make possible an analysis of what Japanese gaming companies, games producers, designers, conceptual artists, programmers, and teams envisage. This line of inquiry is especially relevant if, as Ohtsuka argues, any understanding of the changes to the self in post-modern Japan must take place through a referential inquiry into an unquestioned 'grand narrative' that frames the production and consumption of scripts. How cultural objects—be they games, manga, anime, or TV dramas or other products—are consumed must first be located within the boundaries of a narrative setting (Ohtsuka 2004). In this context, I would like to suggest here that games are a meditative reflection of a bricolage of cultural influences as they consumed on the global stage through a Japanese lens that operates through a certain narrative structure, a theme I will return to. Not only asking what the path-making is in the context of a narrative, but also inquiring into the cultural origins that are crossed with global socio-cultural relations and how they create selves, offers us a departure point for getting under the skin of games. This question is all the more pertinent if the game itself is a cultural composition created as an image that is assembled, actively extracting new territories from different milieus.

With path-making in games, there is therefore a way to 'unlock' and 'disinter' on varying levels. The above genres, popularized in the mid 1980s by large Japanese companies producing arcade-oriented games for domestic and then international

consumption, saw these genres successfully transfer to other global markets, specifically the U.S. and Europe, which at the time had their own influential markets. In this background, users learnt to and continue to learn to negotiate the dynamics of the game. It is at this point that we should look more closely at these pathways.

Pathway creation and negotiation

Pathways created, negotiated, conditioned and conditioning lead the player to goals, yet they are products of subjectivity (Guattari 1996). Is the subject (the self) under threat from being machinically subsumed to following specific pathways? Pathway creation fashions routes that users can negotiate in a procedure that normalizes experience. However, these pathways do not just exist within the game itself but represent pathways that users might already be familiar with. Technology may be nothing more than a mere reference to hyper-developed forms of subjectivity. Games and the pathways they create can contribute to new assemblages of identity that often seem like contradictory forms of subjectivity and to how we have taken to transferring social practices to the digital plane. However much the end user is allowed to feel that they have freedom in entering the game at will, saving positions, or continuing after having failed countless times in progressing through a specific stage, the constant allure of the goal draws the player back for more. Freedom as such can be perceived as being normative. This allure extends to the consumption of other games that function within similar genres. Another pathway therefore links the user along specific experiences that can become normalized ones transferable across genres.

Pathways directed by computer games industries, the architecture of C.P.U.s, and the social/cultural background of the constructed natures of games point to the distributed ensemble that are collective subjectivities engendered through games. Processes, pathways, and their negotiation pass through a number of institutions embedded in cultural and social histories. Through technological innovation, the past can be reworked and trammelled to offer new modes of being: to uncover hidden aspects, but always on careful introspection. Guattari specifies that the apparatuses that create these paths are embedded in not only sociological relations, but also their division and segregation. Games are anchored in *finitude*, their limits technological, although as I mentioned they are constantly pushed and tested through the blanket notion of infinitude. Yet should it be down paths, stipulated by technology that is possibly an 'entrapment' in the Heideggerian sense? The progression enacted along paths motivates games design to play with concepts of limited infinitude, allowing the player to take part in a liminal reality that can appear to transcend and permeate

the skin of the TV, offering new ontological modes of being (Escobar 2000; Turkle 1984).

At the same time, there is a blurring of boundaries as the domains of heterogeneity and homogeneity merge; as discourse and practice become symbiotic. Games can appear as organless bodies (or vice versa), self contained representations whose architecture is paradoxically as faithful to the landscape of the city as it is to that of our bodies. On one level, they are this. On another, they encode the political practices that mirror external events, informing players of practices that are not so unfamiliar. Thus, they are not created as context-free referential markers.

In this sense, Japan is at the forefront of the simulacra of the mundane, offering a growing field of genres that find their way into the home, made up of the hubris of Japan's modern cultural landscape and history. Recreational activities such as fishing, going to school, doing house chores and management, trips to family villages, the entering of hot springs, all inscribe nostalgia, a space of intimacy in familiar surroundings, allowing players to transgress the internal time of the game. Thus, games as an exploratory medium of our 'selves' and the different facets of our lives are localized in a whole range of settings, yet always pre-mapped for consumption based on prevalent discourses that run through society.

Who 'maps' these topographies and defines the social landscape of computer games? The production of computerized subjectivity as expressed through lived experience is discursively inscribed. And, discursive social practices are innovative and dynamic as the games produced for Japan's internal domestic markets find themselves, recoded, subtitled, dubbed, repackaged, transferred and circulated in America, Europe, and other parts of Asia. Furthermore the internet has now become a perfect source for disseminating the cultural code of Japanese games to worldwide audiences who do and can actively search out for these 'byte-sized' chunks of alterity.

Games are commodities of the imagination and identities are now consumed through technologies and their franchises. As a form of consumption, the mega stars of Japanese computer games find their way literally into the niches of the hearts and minds of players. The structures of games increasingly find themselves seeping into the lives and imagination of the public domain. They *seem* to be flexible and *adaptable* to subjective positions, to traversing class, sex, race and ethnic boundaries, if not obliterating them at times. Paul Gilroy is bold enough to state that technologies have started to show how irrelevant race is as they highlight the illusion of modernity in this post-Fordist technological period of human existence (Gilroy 2000). Yet, divisions exist very clearly in games. In the resulting embrace, encoded ideologies, histories and politics subsume the player to invisible discourses that efface traces of resistance. There is a circulation of knowledge, semiotic signs, visibility and

textuality and the predisposition for the worship of technology and the objects they create (Haraway 2000).

It is here that it becomes clear the extent to which games can codify capital relations into our new selves through new discursive practices. The conceptualization, creation and implementation of computer technology, architecture, software and design reside in a network of capital flows (as objects): capital as a mode of semiotic reterritorialisation of our consumptive practices. As Guattari states,

now, though, that role would be played by symbolic capitalization of abstract values of power bearing on economic and technological modes of knowledge indexed to newly deterritorialized social classes, and creating a general equivalence between all valorization of goods and human activities (Guattari 1996, 26).

Capital restructuring changes how we relate to those objects we commodify, which in turn recommodify our social relations. Within this process, some boundaries, paths and channels are opening, and others are closing. The transmission of information, encoded in a sequencing of events, is mirrored in the geopolitical and consumptive practices in Japan and how this culturally encoded information finds itself spilling out into other cultural networks as a window on them. An example of this window is *Metal Gear Solid* (MGS), a series with a pedigree stretching back into the 1980s. One of Konami's flagship products, this series/brand now has an international audience. MGS offers landscapes and scenarios that seem to be straight from a Hollywood film script. Yet this script (a linear trajectory), is embedded in a specific gaze that rests on changing geo-political situations. In this post 9/11 period, Konami have done well to manipulate and market nightmare scenarios that can be imagined in two ways: as a fictional alternate reality (as a fantastical narrative) or as an interpretive reflection of hegemonic capitalist relations (spilling out of a realistically imagined America). These are re-assembled to ship back to other milieus where the process can again be reworked.

I would argue that the consumption of these different scenarios are a strong reflection of how Japanese cultural products are part of a larger symbiotic self-referential network. On one hand, scenarios can be fantastical (as imagined for one market, Japan), yet on the other, they can be a series of interpretations of predicaments present or future which reflect embedded, scripted realities creating a certain tension (still imagined yet for another market). Here, Ohtsuka's narrative can be said to be the expression of a regime of signs that eventually find their way into a pragmatic system. This in itself reinforces the larger symbiotic self-referential network.

Here, a certain tension allows for the flow of objects to go unimpeded in their cross-cultural journeys to fuel imaginative practices. What is interesting here is how a certain logic is thought-out as a cultural product—or rather brand—and how it debuts

on the global stage for consumption in other markets. What should be questioned here is in what kind of context specific capital relations are encoded and whether there is spillage where more than the capital product is consumed. Cultural critic Eiji Ohtsuka has argued not only that there is spillage, but also that the scripts that guide games create narratives as a form of capital penetration functioning as ideology (Ohtsuka 2004). This overcodes any previous understanding of ideology that may exist by placing the narrative—in games—at the forefront of explaining imaginative social relations through capital ones. It is this framework that drives the construction of not only games, but also markets. He states that ‘it is impossible to add to software products that do not have the form of a story built in. After all *objects* are not media. Thus, it is necessary to add fragmented images to these objects, to add to a product a specific story that arouses the recipient (software designers) to combine fragmented information and to offer to individual consumers a narrative that contains a certain spontaneity’ (Ohtsuka 2004, 21; my translation).

Games and their narratives in the above context are, as I see it, recodified with capitalist relations (although this can be genre-specific). These relations penetrate an inner space that knows no limits in terms of growth and even though games and hardware are finite in themselves, they inscribe notions of infinitude. Capitalist relations are reworked and etched on to computer architecture and bubble under the surface of games. These relations can be constantly reworked through innovative technification. Infinitude rather than finitude is foregrounded, solidly locating games in cultural and social contexts that mirror capital relations in our real world.

Cultural interfaces, hybridised selves

As seen so far, the interface of the computer game is not just a cybernetic system that performs the perfunctory role of mediating and guiding the participant and their use of a games structure. Technology is increasingly becoming an interface for our inner and outer lives (Poole 2000; Johnson 1997). Organism and machine become coded devices for exploring the source code mirroring our everyday lived realities. Games offer fictitious realities that mirror social and bodily realities, specific products of the cultural imagination and creative resources that open up an electronic box of digital avatars who bear nothing more than the mirrored messages we bring upon ourselves. We are, as Haraway has suggested, creating networks of chimeras as seen with Nintendo’s *Zelda*, but only with a pathway that exists within a larger narrative framework as Ohtsuka argues. Technology allows for computers to propagate our fantasies, creating new pathways that emerge to offer us different *ontologies of being*. Yet, they are irreverent upstarts and cross boundaries with impunity, offering a

complex pantheon of cultural symbols reworked in a kaleidoscopic fashion.

As gaming becomes further institutionalized as a practice, its embedment and anchoring in our societies allows us to believe in the libratory power encased in these experiences: in the creation of new and complex ontological and epistemological orders. As these normalize, they become routines and settle down as fixtures in our lives, bringing to the fore a possible politics of osmosis. We interface, crossing digital divides at whim, as consumers of our fantasies. Yet they are very much rooted in our social and cultural traditions, in our everyday lived social experiences. Game structures, the objects that inhabit them, and the Japanese socio-cultural norms that inform them spread to other geographical areas where gaming is prevalent, complicating many former boundaries.

As argued so far, ontological reality has been progressively redefined as not necessarily rooted in discourses that emanate from a Western sphere of cultural consumptive construction. When in *Zelda* or *Super Mario* we are allowed to see our reflections in mirrors strategically found in the games, who is it that we are staring at? Through a camera floating just above the character, to being able to shoot in (zoom in), or pull out (zoom out), and see the world as 'they see it', who is doing the viewing? Mario penetrates different worlds through osmosis; he leaps into paintings on walls that demarcate experiences. Computer-based games reflect our constructions of our multiple selves. These games are beginning to form part of a truly multi-cultural telos that increasingly encompasses those parts of the world whereby connectivity ensures creating networks of multiplicity and hybridity. In this post-Fordist age, will the technologisation of society finally break down those invisible boundaries that have for so long divided and maintained difference and otherness (dualisms), and then at what distance?

Conclusion

A game does not just form a single autonomous unit. It bears a history. As a concept and idea, a game is worked on, created, brought forth, and revealed, and it comes into being. It is more than that, however. As a specific cultural product, a game resides within an interconnected sphere of relationships, a network of parts: of assemblage and disassemblage. In the case of games that emanate from Japan, socio-cultural norms, pathways and selves are a reworking in juxtaposition to processes of globalisation foregrounded by capital relations. Within this context, new generation machines are now reaching critical points that are crossing thresholds, contributing to factors in the 'self-assembly' of new assemblages. Japan has led the way in defining these new assemblages through the social networking that new generation machines require. The current penetration of new technological innovation has moved down this path

as Nintendo has demonstrated with its new generation machines which demand not only a different approach to how we create a self, but also a re-negotiation with other selves through the techno-human interface. This can be seen through multiple participation with the games console as a mediator between man and machine as the Nintendo Wii has successfully shown in Japan. Even though an inferior machine in contrast to Sony or Microsoft's new generation machines, the Wii has outstripped other machines exactly because of the type of social relations it demands from users. This is in juxtaposition to the solitary or at the most, the dual participatory nature of games consumption on other consoles or genres as seen with the earlier example of *Dance Dance Revolution*, a precursor to the kind of socialization the Wii now offers. Some Western genres orientate themselves toward a singular relationship between user, game and console. Yet, bodily social networking, in opposition to a virtual form, highlights a move toward a predominance of socio-relational forms of interaction which are now more complementary and group orientated. This tendency emphasises how cultural forms of representing 'selves' can be etched into code as an invisible source of group-oriented self-organization. These new connections are pointing toward processes of self-organization and in the process say a lot about our 'selves'. This blurring of boundaries between our 'selves', interfaces and assemblages changes the ways in which we categorize the distinction between our physical selves and non-physical objects where we start to live in a teleology of signs and meanings that are reconfigured to supply us with new meanings through technological change.

With microprocessors becoming more and more powerful, more and more of not only Western narratives of civilization and how 'we should be', but also Eastern ones, in this case Japan's, find their way into the vast flat expansiveness of silicon chips. More and more inner space is being cartographically mapped out and discovered. With this mapping of internal space, the creation of computer-based epistemologies of control and the multiplying of the self are being created. Whereas visible mechanisms were once in place to discourage the transgression of circumscribed spheres of context and contact, we now find these breaking down. The divide is ambiguous. Social relations are being re-arranged through science and technology. These technologies now allow for incredible play-blurring categories and boundaries. Even nature can be charged with polygons, algorithms, programming techniques, and human ingenuity, with representation of the social sphere of production, construction and politics belonging to fantastical orders. We are, however, still dealing with constructions based upon conceptions of who we are. Objects, people and environments are seen as parts, not forming a unitary whole as such, but rather being interacting autonomous units performing through interfaces that transport, transmit and unlock in constant prefigured

combinations and only existing within a narrative structure. We are thus seen in terms of disassembly and reassembly. Haraway sums up these new assemblies:

No objects, spaces or bodies are sacred in themselves: any component can be interfaced with any other if the proper stance, the proper code, can be constructed for processing signals in a common language (Haraway 2000, 302).

This code can be our 'selves' and their transferral across the domains, realms, genres and boundaries that exist in the world of games that reorganise our identities. Momo Toru points to these new identities as being a 'process involving the dissociation and integration of the ego' (Toru 2000, 23). Even in our societies, our 'self', although unique, is an aggregate of our 'selves' that form the personae we employ in enacting, performing and interacting with computer games.

Processes of pathway creation, mediation and strategies play an important role in delving in and out of our 'selves' and redefining our bodies from within. Our boundaries between the self, our 'selves', and how we constitute them through social interaction and technological interfaces point towards new forms of what I see as an osmosis of the self. We are becoming more fluid, but this is just part of the equation. Our 'selves' are being re-configured, not through a common language, but through code, the semiotics of a transition from organic creations to fusions that through the correct interfaces can offer different modes of being. We, our 'selves', become objects of knowledge, code inscribed on our bodies, the player conditions/is conditioned by the paths they want to take.

The redesigning and reshaping of our 'selves' through the blurring of boundaries organizes production and reproduction in the social and cultural sphere to conform to new ontological imbroglios. The union of our 'selves' through computer games can be fleeting or immersive. These new references do not adhere to former treaties of how we previously imagined our boundaries. And, I feel that there is nothing more potent for changing or restructuring social relations than by redefining our relationships with our 'selves' through technological enquiry.

References

Printed material:

- Arendt, Hannah. *The human condition*, 2nd ed., Chicago: University of Chicago Press, 1989.
- Azuma, Hiroki. *Dobutsuka suru Posuto Modan—Otaku kara mita Nihonshakai* (The post-modern turned animal: An Otaku's take on Japanese society), Tokyo: Kodansha Publishing 2001.
- Csikszentmihalyi, Mihalyi, Eugen Rochberg-Halton. *The meaning of things: Domestic Symbols and the Self*, Cambridge: Cambridge University Press, 1992.
- Deleuze, Gilles, Felix Guattari. *A Thousand Plateaus Capitalism and Schizophrenia*, Minneapolis: University of Minnesota Press, 1987.

- Escobar, Arturo. 'Welcome to Cyberia', in *Notes on the anthropology of cyberculture*, ed. David Bell and Barbara M. Kennedy, London and New York: Routledge, 2000, 56–77.
- Fried, Ian. *Sony sets date for Playstation 2 debut*, Cnet news [Online] 10 May 2000. Available from: <http://news.cnet.com/Sony-sets-date-for-PlayStation-2-debut/2100-1040_3-240379.html> (accessed 3 March 2009).
- Gatens, Moira. 'Through a Spinozist Lens: Ethology, Difference and Power', in *Deleuze: A Critical Reader*, ed. Paul Patton, Oxford, Cambridge, MA: Blackwell, 1996, 62–188.
- Gergen, Kenneth J. 'Technology and the Self: From the essential to the sublime', in *Constructing the Self in a mediated world*, ed. Debra Grodin, Thomas R. Lindlof, Thousand Oaks, CA: Sage, 1996, 156–78.
- Gilroy, Paul. *Between the Camps*, London: Allen Lane, 2000.
- Guattari, Felix. 'Regimes, Pathways, Subjects', in *Incorporations 6*, ed. Johnathon Crary and Sanford Kwinter, New York: Zone, 1992.
- Haraway, Donna. 'A cyborg manifesto: Science, technology and socialist feminism in the late twentieth century', in *Notes on the anthropology of cyberculture*, ed. David Bell and Barbara M. Kennedy, London, New York: Routledge, 2000, 291–325.
- Heidegger, Martin. 'The question concerning technology', in *Being and Time*, ed. William Lovitt, New York: Harper and Row, 1977, 69–104.
- Heine, S.J., D.R. Lehman, H.R. Markus, S. Kitayama. 'Is there a Universal Need for Positive Self-Esteem?', *Psychological Review* 106, 4 (1999): 766–94.
- Ito, Mizuko. 'Inhabiting Multiple Worlds: Making sense of Simcity in the Fifth Dimension', in *Cyborg Babies: from techno-sex to techno-tots*, ed. Robbie Davis-Floyd, Joseph Dumit, New York: Routledge, 1998, 301–17.
- Johnson, Steven. *Interface cultures. How new technology transforms the way we create and communicate*, San Francisco: Harper San Francisco, 1997.
- Kanellos, Michael, Jim Davies. *Sony: Playstation2 the linchpin in new home system*, Cnet news [Online] 6 October 1999. Available from: <http://news.cnet.com/Sony-PlayStation2-the-linchpin-in-new-home-system/2100-1040_3-231089.html> (accessed 3 March 2009).
- Kondo, Dorinne. 'Dissolution and Reconstitution of Self: Implications for Anthropological Epistemology', *Cultural Anthropology* 1, 1 (1986): 74–88.
- Latour, Bruno. *We have never been modern*, Cambridge, MA: Harvard University Press, 1992.
- Nintendo Gamecube Press release. *Nintendo Gamecube* [Online] (1999). Available from: <http://telepixtvcgi.warnerbros.com/dailynews/cool/12_01/gamecube.html> (accessed 3 March 2009).
- Ohtsuka, Eiji. *Monogatari shometsu ron kyarakutaka suru 'watashi', ideogika suru 'monogatari'* (A theory of narrative destruction: the characterized 'me', the ideologized 'narrative'), Tokyo: Kadokawa Publishing, 2004.
- . *Monogatari shohi ron* (A theory of narrative consumption), Tokyo: Shinyo Publishing, 1989.
- Piaget, Jean. *The child's conception of the world*, London: Routledge and Kegan, 1971.
- Poole, Steven. *Trigger Happy, the inner life of videogames*, London: Fourth Estate, 2000.
- Strathern, Marilyn. *Property, substance and effect. Anthropological essays on persons and things*, London, New Brunswick: Athlone Press, 1999.
- Toru, Momo. 'Jibun shi toshite no terebi ge-mu' (Video Game, My Memoir), in *Bit Generation 2000. Catalogue for exhibition of Japanese T.V. Games*, Kobe: Kobe Fashion Museum, 2000, 22–7.

Turkle, Sherry. *The second self: Computers and the human spirit*, New York: Touchstone, 1984.

———. 'Cyborg Babies and Cy-Dough-Plasm. Ideas about self and life in the culture of simulation', in *Cyborg Babies: from techno-sex to techno-tots*, ed. Robbie Davis-Floyd, Josphe Dumit, London: Routledge, 1998, 317–30.

Games:

Dance, Dance Revolution, Arcade Japan/worldwide: Konami, 1998–. Available from: <<http://www.konami.jp/bemani/ddr/jp/>> (accessed 3 March 2009).

Final Fantasy, Playstation2 Japan/worldwide: Squaresoft, 2000, 2002, 2004.

Guitar Freaks, Arcade Japan/worldwide: Konami, 2000. Available from: <<http://www.konami.jp/bemani/gfdm/>> (accessed 3 March 2009).

Metal Gear Solid, Worldwide: Konami, 1988–. Available from: <http://www.konami.jp/kojima_pro/english/index.html> (accessed 3 March 2009).

Radiant Silver Gun, Sega Megadrive Japan: Treasure, 1998. Available from: <<http://www.treasure-inc.co.jp/products/lp/silvergun/sgindex.html>> (accessed 3 March 2009).

Samba de Amigo, Japan/Worldwide: Sega, Sega Arcade/dreamcast, 2000. Available from: <<http://samba.sega.jp/>> (accessed 3 March 2009).

Shaka to Tamborin, Arcade Japan: Namco, 2002. Available from: <<http://sega.jp/arcade/syakachu/>> (accessed 3 March 2009).

Street Fighter, Japan/worldwide Arcade and all console platforms: Capcom, 1991–.

Super Mario 64, Nintendo 64, Japan/Worldwide: Nintendo, 1996.

Taiko no Tatsujin, Arcade/Playstation 2 Japan/worldwide: Namco 2000. Available from: <<http://namco-ch.net/taiko/index.php>> (accessed 3 March 2009).

The legend of Zelda, the Ocarina of Time, Nintendo 64, Nintendo, Japan/worldwide: Nintendo, 1998.

The legend of Zelda, Majoria's Mask Nintendo 64, Japan/worldwide: Nintendo, 2000.

Virtual Fighter, Arcade/home consoles, Japan/worldwide: Nintendo, 1993–.

Mario LOPEZ (marioivanlopez@gmail.com, marioivanlopez@cseas.kyoto-u.ac.jp), Assistant Professor, Center for Southeast Asian Studies, Kyoto University

✉: 46 Shimoadachi-cho Yoshida, Sakyo-ku, Kyoto 606-8501, Japan