Peep-boxes to Pixels:
An Alternative History of Video Game Space

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ABSTRACT

"Peep-boxes to Pixels" offers an alternative cross-section of gaming history. Focusing on the dichotomous profiles of the video game arcade in the US and in Japan, the paper traces various cultural and technological planes as they scroll amongst each other in forming the collective zone we call an arcade today. This metaphor I extend by appropriating into my discourse a term that video games appropriated from astronomy: parallax.

Of particular interest in this alternative history are the Dutch peep-boxes which, when introduced to Japan and given a pay-per-play cost, can be thought of as proto-arcade games. However, these objects are generally mentioned in regards to a history of cinema. Why not a history of games? Certainly, peep-boxes, pointillism, penny arcades, pinball machines, pachinko and the pixels of Pac-man begin to interrelate as parallax once one weaves together the pedigree of their respective spaces.

This paper asks a lot of questions. What does the respawning of fetishistic game historians leave behind? What cultural remnants have been blasted right past? What framework(s) made their debut in Japan so successful, and why should or shouldn't we be surprised that the Japanese arcade scene is so much more informed and vibrant than ours? (It is.)

In looking at a history somewhat glitched and incongruent with the common offerings, I hope a more cosmopolitan cerebration may produce more interesting game content and more compelling places to play. The future of play may lie in the past.

Author Keywords

Arcade, *geisen*, *geimu sentaa*, Holland, history, *oranda*, parallax, historiography, glitch, *hanafuda*, SNK, Sega, Nintendo, pinball, pachinko.

OPENING CINEMA

The history of video games, like any history, is created in terms of how it is written. Not to enshroud the birth of the objects themselves with pedagogic trickery, but, as one might infer, the history of video games is, then, rather nascent.

Many histories more or less begin with Steve Russell's in-house Spacewar!, given a coin slot and called Computer Space by Nolan Bushnell (Wolf, 36 -- and others). It is the coin slot that becomes the synecdoche: these histories conspicuously arise with (and are preoccupied) by the economic girth of the video game market. The histories of Arthur Asa Berger, Steven Poole, J.C. Herz, and other video game histories follow this pattern, which is largely known to popular culture discourse in general. The statistics for the tokens-cum-capital are spread about as if the money justifies the writing see Berger, 25), perhaps serving as a *cordon sanitaire* between a discourse that seems to romanticize the same games which had previously elicited a more immediate and vituperative Western scholarly reaction: writings preoccupied by psychology fretted about video game addiction, licentiousness, and the general decrepitude of America's innocent youth. Different from writing about, say, the French Revolution, a history of video games can now be injected with a tone of nostalgia and retro appeal; most writers ostensibly were not around to see Gericault paint images of revolution, but were around to see Bushnell's Atari produce the decidedly minimalist and exegetically haptic Pong.

This was not until theorists were given permission, I posit, by the dollar signs in the profit reports that told academia Hollywood had been dwarfed by polygons and pixels. This history is well written by others and will not be accounted for here.

Perhaps a new generation of academics is set to change how this history is written. The placement of Pong in the local bowling alley is as much a part of cultural memory now to the younger bearers of the joystick as is France's penchant for the guillotine. The very recent creation of a history of video games defined by technological paradigms (to which Berger devotes much space) and the profit of grinning computer wonks is not the only possible history, especially to those who see the artistic and cultural worth of video games regardless of big business.

This paper aims to look at a longer and more extrapolated cultural history. Recalling the dominant synecdoche of the coin slot, I suggest looking instead to another word that appears (albeit in a different context) in these histories: space. The major players in early game history—Computer Space, Spacewar!, Space Invaders—all refer to it, at least in the astronomical sense. In the architectural and psychogeographical sense, the history of these games—and this may sound something like Ted Bestor's account of Tsukiji—is necessarily tied to the kinds of spaces they were put in.

Acknowledged by Herz (44-45), Wolf (23-24), and others, arcades are a subject of wonder in themselves, with a colorful history that, I feel, is addressed though under- or misrepresented in common scholarship. Video game arcades are not without vast historical precedent. They are responsible for the coming of age of video games, and are now a useful indication of the state of video games and of society as a whole.

The claim of this weighted preamble is that arcades are a gestalt of many histories smashing together: the histories of leisure space and ludic endeavors, in Japan and in the West, fuse tightly into the considerably pluralist video game arcade. I will be risking many a non- sequitur by looking at (among other things) how Dutch peep-boxes, pachinko, pinball, and the companies that produce them all intersect amongst the flow of arcade tokens. I will conclude with a less weighted discussion of intertextuality in terms of how arcades are represented rather eulogistically within the diagetics of games themselves.

But first, one last bit of theoretical grounding. Video games are, in terms of explicitly marketed purpose, at least, a leisure activity. Why is it—besides the money— that the games are worth looking at? I answer this question by grounding them in the historical modes of the banal, the everyday, the ludic and the leisurely—modes which are not without theoretical precedent proffering their importance in adding (ironically) a more human dimension to social science. For example, David Leheny's *The Rules of Play: National Identity and the Shaping of Japanese Leisure* is concerned with the "explanation for [Japanese governmental] leisure initiatives", and how it enforces the Japanese government's desire that the Japanese "should behave...like Americans and Europeans, but they need also to remain uniquely Japanese." (3) In Leheny's view, the institutions of leisure reflect not only the society but even the governmental machinations of that society, which is why he makes the following caveat on the preceding page: "The Japanese government determined...that golf course development merited state support but has not made the same determination about video game arcades." He also confesses gingerly to preferring video games to golf, and remarks that he knows

many Japanese who do the same. I use this example as a flag to illustrate that

1) leisure in general can say much about a modern society,
2) leisure is subject to public policy and governmental control, and
3) decisions are made about identity based on the value attributed to a certain type of leisure.

In terms of Koichi Iwabuchi's thoughts on "glocalization" in his book *Recentering Globalization*, and given the appearance in Japanese scholarship of very pro-Japanese associations with the video game (Masuyama Hiroshi's *Terebi Geimu bunkaron*), it may become surprising as the paper progresses that there is truth in Leheny's observation about arcades. With these themes in mind, I insert the proverbial coin and begin this brief alternate history of video games.

SPACE INVADERS

It has been said that the West brought with it a "new vision" to Japan, metaphorically referring to larger matters through the devices of *rangaku*, ostensibly of rather drab scientific use by the Dutch who introduced them. As Timon Screech details in *The Lens within the Heart*, the technological devices were of course a source of marvel for the Tokugawa elite who were fortunate enough to tinker with them. Screech also explains how these devices were gateways to a new vision—they "supplanted the empirical gaze", in his terms. (94) A new perspectival visual style, *ranga*, became introduced through these devices.

Perspective images even demanded a form of concentration and interactivity: in order to properly engage with the image, the viewer had to be lined up just so, stand still, and forfeit outside interaction in any "spiritual way." (98) The peep-box (which, to me, resembles the ill-fated Nintendo viewing device, the Virtual Boy) presented the Japanese with an interface made of glass, representing what was seen as a Western "lens culture" (borrowing a term from Norman Bryson) and foreshadowing the video game interface of the glass monitor. These glass plates laden with Western visual convention were swappable, not unlike Babbage's precursor to the computer, the Analytical Engine (Manovich, 21) – or the modern video game cartridge.

The visual effects of these devices suggest a kind of warp to modern day game effects. Screech's description of a zograscope's optics are reminiscent of game sprite effects such as scrolling and scaling. (98) The Magic Lantern Society's *Encyclopedia of the Magic Lantern* detail Japanese magic lanterns referred to on page 120 as *furo*, due to the resemblance to a Japanese bath. (Thus, here, we have already a Japanese indigenization of a Western

device.) The glass plates made possible "animated effects" (120, 145); indeed, the lanterns and the peep-boxes received their source from strips of animated, hand-drawn characters--thus, in my view, resembling the Cartesian figures of early video game sprites: flat, often abstracted representations of recognizable semiotics. Shiba Kohkan, a Japanese fanatic of these amusement technologies even began to produce the plates himself, injecting, no doubt, Japanese identity.

Screech's description of the themes in content also sound familiar: demons, devils, folk tales, etc. may be right at home in Yanagita Kunio's "monsterology", and certainly make up a great deal of video game themes today. As they do today, the amusement devices of the time reflected shared memories and cultural semaphores. Before the crescendo of the significance of these within my framework, it is useful to ground visual culture within another framework. Frederick L. Schodt's *The World of Japanese* Comics contains a chapter entitled "A Thousand Years of Manga", in which he follows similar methodology in making the stretch from the subway pacifiers of today's manga to the religious "comic art" of centuries past. *Choujuugiga*, he contends, are the "oldest surviving examples of Japanese comic art" (28). He of course proceeds to draw from discourse about the floating world and *ukiyo-e*, much like Screech does. His descriptions of humorous themes, cosmology, "cartoon style", and the usual *tengu* and *oni* certainly inform the Japanese slides made for the peep-boxes. They may then be responsible for the cultural grounding and source material of today's games, suggesting, at the least, a common taxonomy of the games and manga, and reinforcing the degree of identity at stake.

A MECHANIZED ATTACK

Now that the device and the vision are explained, the theme of the paper can manifest itself: these devices of Western technology, ostensibly of scientific use to begin with, became ludic curiosities when they passed the threshold into the East. Moreover, they became imbibed with Japaneseness, appropriated, at least, to fit the desires and use of the public receiving them. And, above all, they became devices of *paid spatial amusement*. Or: Western technology, retrofitted for leisurely endeavors, and set up within a bound space that demanded a fiscal transaction for use.

A print attributed by Screech, page 121:
One peep in the karakuri *costs three sen*
And 10,000-leagues-off Holland
Comes before your eyes.
Look at it together -- those before never knew!
On the wide, wide seas
Sailing ships returning.

This textual account of the magic of the devices lauds the worth of forking out one "credit", to borrow game

semantics, as a means of experiencing another space – a "warp zone", of sorts. Screech continues to detail the "social dimension" of the leisure spaces (which he takes care to describe as "business ventures", if one is still of the habit of looking at game history in terms of profit), explaining that "eccentric or rude behaviour was not tolerated..." (124) This implicit fear of the licentious aspect of the space should resonate especially soundly with those lamenting the gelded arcades of today, with more rules posted than games playable; Screech even offers a poem about the hygienic aspect of noses sharing contact with the device. These rules, Screech follows, served to keep clientele moving, and money pouring in -- just as arcade operators may crank up game difficulty and disallow any rambunctious behavior. I feel much of this to rhyme with modern video game arcades: Screech's rhetoric seems to lend itself more to art history, and by my polemic suggestion, speaking of video games is precisely that. But what is it about these spaces that fit into any other discourse of Japan? There are more precursors to and theories regarding Japan and technology; I continue with them in order to further explore the element of leisure and the value of resonance with modern arcade space.

One way to ground the banal or leisurely with important cultural analysis is to use it to explain Japan's rapid adaptation to industrial technology once it finally blasted the Tokugawa moratorium. Yamaguchi Masao does precisely that in looking at Edo "machinery" used in theatrical contexts. From "the ludic relationship between man and machine in Tokugawa Japan", Yamaguchi posits that "one reason for [Japan's] rapid progress is that she grafted the newly introduced Western mechanical culture on to her culture..." (72) An overarching theme of the chapter is the transformation of space at the hands of ingenious Japanese mechanics—thus, a visual spectacle by way of an apparatus-based *modus operandi* already has Japanese precedent. Liaisons to modern popular culture are made in sound fashion, comparing the mechanical "marionettes" of these stage shows to the friendly robots of today's manga. Thankfully for my framework, Masuyama Hiroshi compares video game space and characters to a world of hanging "marionettes" that breach gravity (138); I concatenate the two statements in claiming these mechanical amusement devices are replicated in both games and manga, recalling also the similarities found by Schodt's investigations. Yamaguchi goes on to conclude that Japan "industrialized through the spirit of play, and not through calculated economic logic" (82). This should begin to evoke portent images of game arcades. This is also attributed to Japan's supposed "sentiments of familiarity" towards machines and perhaps to the ease of digestion of machines-cum-games overall. In any case, they anticipate the coming urban leisure spaces of the Bakumatsu period, and, then, those of today.

These scenes are given a sentimental tribute in a modern arcade fighting game that, though it has a cult fan status, met much more success in Japan than in the United States. SNK's *Gekka no Kenshi: Bakumatsu Roman*, translated disappointingly as The Last Blade in the West, depicts scenes of the era with an austere aesthetic, worth a full-length paper in their own right. I will return to this idea of games representing games later.

Thus, just as peep-boxes were appropriated as curious boxes of delight, per Yamaguchi, perhaps arcade spaces are also given a degree of immunity as leisurely items rather than the demonized quandaries of Neo-Luddites that such forms have a history of becoming in the West.

TILT

To warp a few levels ahead and a hemisphere away, pinball and pinball parlors have suffered just that. A phenomenon endangered but still retroactively celebrated, pinball has its own history involving the gamut from springs to civics to semiotics. In a way, this history comes across as more assertive (perhaps until recently) than that of video games—with an ironic possible impetus being the threat of video games overwriting it. Roger C. Sharpe's book, *Pinball!*, begins the history with musings of ancestors "rolling... stones at holes in the ground" and moves quickly from golf to a wonderful intertextual reference: "...the bagatelle board that Charles Dickens' Mr. Pickwick played at the Peacock Tavern." (21)

These precursors to pinball begin cropping up around the 1870's -- a pivotal time for amusement, for it coincides not only with the tapering of Screech's look into peep-boxes and magic lanterns, but with the advent of cinema (not for this paper) and the foundations of Nintendo. Carnival-style games, zoetropes, and other antiquated devices such as one might see represented in Disneyland's Main Street Penny Arcade certainly fit into this timeframe, but the details are left out of both Sharpe's history and mine. Sharpe's simple history, though, *romanticizes* the post-bagatelle devices amongst the *economic* hardships and *cultural* associations of The Great Depression, citing pinball as a *leisurely* savior from the reality of the time (italics added to cite the developing pattern). This history is also written globally: Sharpe is quick to compare pinball to pachinko, and even continues to discuss the nuances of pinball playing throughout the world. It is, too, a history of entrepreneurship and economic exploits: the do-it-yourself wizardry of pinball father Harry Williams sounds very much like that of Nolan Bushnell and his Atari endeavors (refer to any text on video game history). Here, then, is the predicted symbol: the arcade game's coin slot. A common element between pinball and Pong, this coin slot would have a profound effect on pinball space. Technological paradigms are a theme here, as well: Sharpe speaks of mechanical additions such as flippers and the "tilt" feature much like Berger and other authors seem to discuss video games in terms of "bit generations"

or degrees of representational realism. Properly contextualized technological marvel is, just like in the case of the Tokugawa peep-boxes, what draws a crowd and thus transforms the space into one of leisure and ludic curiosity, after all.

Pinball machines require a good deal of space in which to be played. The addition of technology and money, mentioned above, prove to be a troublesome triptych for the remainder of the development of these amusement spaces. Sharpe's history details how associations with visually similar gambling devices brought about a general fear of the "unfavorable association between children and older adolescents or adults"—and, therefore, "delinquency." Thus, pinball was banned in New York City in 1941and many machines destroyed; similar occurrences had happened prior in Los Angeles and Chicago. (49) This stigma placed on the pinball parlor (despite the warm and fuzzy appellation "parlor") was to haunt video game arcades in the future, even after the pinball bans were lifted (never mind that its ubiquitous coin slot was to be a symbol of the justification of academic video game discourse a decade or so after that). There are hints, too, of the state of things to come, as Sharpe optimistically describes the joint endeavor of Bally (pinball king) and Sega (Japanese game giant) to open arcade chains with complacent-sounding titles like "The Kingdom of Oz". Though these perhaps satisfied the fretful mothers and fathers of the 1990's American status quo, also cued the threnodies for American arcades. These undulations of leisure policy leave strong suggestions about American life, to be rounded up later.

But what of Japan? Return again to the days of early Meiji. As bagatelles slowly mutated into the great American amusement companies like Bally, Japan, too, saw the formation of companies with varying relationships to leisure and technology. Nintendo, for many the undisputed champion of the home video game market, began to take shape in 1889, marketing *hanafuda* cards. (Nintendo would later rule the world of amusement space with Miyamoto's *Donkey Kong*.) The scent of *nihonjinron* here does not go unnoticed: Masuyama's exegesis also incorporates the history of Sega into the rising zenith. According to Masuyama, Sega, an abbreviation of "Service Games", began on a US military base in 1951, fusing with a Japanese company marketing jukeboxes—devices which are themselves symbols of technologically mediated ludic space capable of raising the conservative eyebrows. (124) Though from divergent material background, these Japanese companies would soon be poised to leap from playing cards and jukeboxes (respectively) to video game arcades. Really, these can be seen as related incarnations of leisure which simply undergo changes in morphology as technology and cultural responses dictate. This is certainly true of the flux from pinball to pachinko.

My layman's description of pachinko is simply an abbreviated and faster-paced pinball made vertical and allowed to keep its gambling elements. Sharpe's book mentions this similarly, with photos of what may be proto pachinko devices. Elizabeth Kiritani's article, "Pachinko, Japan's National Pastime", cites a 1920's pinball game that was imported and started the boom—another instance of a Western mechanized device becoming a boom leisure industry in Japan. Immediately, some static between modes of art criticism and cultural studies strike me: in trying to explain this re-orientation of pinball, I thought of the re- elevation that takes place in the art of Jackson Pollack, well received in Japan for other reasons. (His work is made of "superstrokes" of paint flipped about in a sort of "dance" on a canvas placed on the ground, then re-elevated to a position on the wall familiar to Western art.) I must dub this a mostly inconsequential coincidence; besides, most art criticism refers to a "horizontality" in non-Western art and not a verticalization. The theme of space is an obvious player here: nearly all the game centers I frequented in Japan while collecting data for another paper were verticalized into compact-but-multi-tiered affairs, presumably to conserve the precious horizontal space that is so crowded in urban areas. Clearly, Western pinball tables would be problematic in these architectural contexts.

Yet, Kiritani's chapter puts it more simply: "the machine has been tilted vertically so that the seated customer can...play the game with minimal effort." (203-204) Note the word customer: economics are at play here. Her chapter begins with a surprising figure of 1992's official revenues of "about US$154 billion", which, she is quick to note, "dwarf[s] other leisure activities such as golf, video games, or movies." (203) These three activities have all appeared in my history so far; yet, what I call attention to is, again, this cash caveat, a preamble that seems to legitimize the discourse of a pop phenomenon generally regarded as abject (as Kiritani later explains). The figure is staggering, though, if Berger's quote of US$6 billion in video game revenues for 2000 is to be compared to Kiritani's pachinko quotes.

Yet, game revenues seem to be on the up-and-up while Kiritani details the panicked state of today's floundering pachinko parlors. She cites changes in leisure activities (which should sound like Leheny's discourse), yet I wonder to what degree it can be spoken for in terms of space. The space where video games are played is changing—for many, it is now the internet, linking up PCs to engage in long-distance combat or Real Money Trading in Massive Multiplayer Online games. And, as I will discuss (and as Sharpe's description of a "bright new future" for pinball has jinxed), a lopsided deterioration of the importance of such a space is involved. There is attention paid, at least, to the poetics of this space to some

degree. Between the economic figures and discussions of links to organized crime, Kiritani describes pachinko parlors in a somewhat neutral voice, detailing the "garish neon signs" and "harsh military-style marching music" that, as a psychogeographic gestalt, "produce a hypnotic effect" for some players. (203) Neon and techno are generations removed from the Dutch technologies presented in Tokugawa Japan, but I wonder if the "hypnotic" effect is, in terms of a poetic of space and vision, very much the same. Kiritani ends the chapter with descriptions of changes being made to the pachinko space to respond to the competition with other leisure pursuits (at the hand of changing identities or policies, Leheny might wonder), generally involving taking the aggressive edge off the space's visual construction.

INSERT COIN

There is little else to frame before finally talking about the introduction of video games into a public, for-profit leisure context. The details of its birth, though, are recounted numerous times with retro-crazy gusto in existing publications, so my treatment will be rather light. I would like to succumb again, though, to the device of the coin slot: if pachinko predicates itself on the thrill of gambling, and (as Sharpe pleads) pinball a haptic crucible of skill, what is it about the video games that made the grip of their leisure space so different? I posit that it begins with the effort demanding, ocular entry to another visual space by way of a glass interface -- much as was experienced by the bedazzled Tokugawa elite who pressed their (properly wiped!) noses up to the Dutch peep-boxes. Beyond that, I proffer an application of Jim Collin's use of Louis Althusser's *interpellation*, or the "conversion process in which individuals are hailed... by ideology." Early games generally junked narrative and its cinematic associations in favor of a basic, urgent premise—something along the lines of:

"WE ARE THE GALAXIANS
MISSION: DESTORY ALIENS",

the hail from Namco's 1979 classic Galaxian. With the details left to new media theorists, I rephrase clumsily what is going on: a highly abstracted avatar is represented on screen, and the complicit contract denoted by the insertion of a token and the pressing of the Start button is the player's becoming the site of struggle in the game's diagetic space, interfaced by the haptic/optic fusion of the joystick and glass screen. This is a degree of interactivity anticipated by, though not matched by, the spaces previously discussed Moreover, it is exactly this becoming which began to elicit outcries beyond the fears of licentious age-mixing in pinball parlors. Sherry Turkle's anecdote of a thirteen-year-old girl spouting obscenities (how's that for an American moral horror?) while playing a game of Asteroids in a New York cafe ends with this observation: "One is inclined to say she is more 'possessed' by the game than playing it." (The

Second Self, 64) It must be noted that this is from a book dated 1983, when theorists were just beginning to wrestle with the philosophical implications of the computer; similar cautions are expressed in Peter Stoler's *The Computer Generation* in 1984. In any case, one might say this girl was interpellated by the cold and poorly understood pixels, almost as if possessed by a haunted, digital Seurat. Turkle's outlook is much more sober, with this anecdote being a mere illustration, but the damage had indeed been done. Suddenly the simple pleasures of purely mechanical and slightly more physically demanding pinball tables seemed positively wholesome when contrasted with the image of a child's face devoid of any soul, sucked away by nefarious computer technology into a violent and frenetic non-space that reeked strangely of Iwabuchi's concept of Japanese cultural odor.

To make the historical connection more clear: peep-box spaces were subject to strict ethics, pinball parlors were literally destroyed by concerned officials, and pachinko space is being reinvented to be freed of its yakuza image. Video game arcades needed to be controlled, too. Clearly, civics and politics play a role, here, as Leheny's book reminds us to what degree the government can dictate even the most banal aspects of our leisure time--golf uses the most archaic of technology and is more suited to seducing a business affiliate into a deal, and (thus?) the more commendable choice. J.C. Herz's *Joystick Nation* (as do many others) details the rise and fall of these arcades in the United States. A sardonic summary is that parents flipped out and politicians made careers out of appeasing them, and, in responding to cultural ebb and flow, the industry changed the arcade spaces dramatically (and this is my description as a confessed hobbyist): they turned on the fluorescent lights, turned off the neon ones, muted all the noise, repainted everything into pastel, embarked on a semantic overhaul, and dubbed these new spaces "family fun centers."

Beyond this, and this is an observation I have not seen elsewhere, there is a spatial overhaul applied to the arcades. The word "arcade" itself comes from an architectural term describing rows of arches—a spatial rhyme with the rows of arcade cabinets. But, just as arcades were broken, this spatial arrangement, too, was disrupted and thus the word could no longer possibly apply. Cabinets became arranged in clusters, or around the perimeter of the space, with a very interesting locus of control often set right in the center: the prize redemption counter. In terms of space, it sounds frighteningly like Foucault's perfect prison, the Panopticon, which afforded a clear view of all spaces at all times. The official reason for this new counter is the redemption of tickets earned in ironically very gambling-inspired devices for such niceties as fuzzy bunnies and toy cars. Here J.C. Herz's writing begins to fit with mine: her scapegoat for the

death of arcades is Skee-ball (54), which is a symbiosis of bowling and golf in the form of a physical, space-wasting, computer-free game that needed little skill to enjoy. In this sense, the family unit was brought back into the arcades to partake in these more carnival-style amusements—which were, of course, immoral in their heyday, but now given a *cordon sanitaire* of nostalgia as on Disneyland's Main Street. Exiled were games like The Last Blade (mentioned above) that bear a violent premise, but also offer an artistic brio beyond the reach of the status quo. Humorously, I could find nothing even resembling Skee-ball in Japanese game centers.

My time spent in Japanese *geisen* suggest a greater cultural representation in terms of in-game semiotics, a broader base of genres (with genre studies in other publications by Berger serving as keen justifiers of cinema), and an absolute lack of this Panopticon business. Japanese game centers still have a thriving audience of eager players out for more than just leisure. The spaces are still arranged like literal arcades, they're still often dark, and they are generally free of any placating pastels.

Here it is useful to recall again Yamaguchi Masao's discussion of devices. It is perhaps this history of Japan's ability to tame the Western machinery that allows such arcade game spaces such as this to survive. From the peep-boxes on, and perhaps Yamaguchi would agree, Western technology has often been immediately put into a ludic context, and, as an exoticized amusement wonder, rid of any threat. As this history has seen--and as most scholarship on Japanese leisure implies if not moils to prove, Japanese ludic undertakings do indeed seem to value a particular space. The Japanese have a cathartic space for nearly everything, it seems, from relaxation to karaoke to cooking to sex – and yet this does not appear to detract from the construction of a sanctuary of domestic space, either. It seems that in America, even though there is ample space, the status quo prefers to conduct these matters from home. In a practical and prototypically American sense, why bother leaving the house and paying money to play a game when it can be downloaded for free from the internet?

LEVEL SELECT
If this history does not speak to the development of video games as a medium, perhaps their coming of age in terms of self-referentiality and intertextuality does. Again I refer to Jim Collins, but this time to his discussions of texts' relations to other texts (Chapter Two, entitled "Life in the Arena: Intertextuality in Decentered Cultures"). Games have impacted enough other media now to warrant a parlance of considerable dimension. Coffeetable books, such as *Supercade* by Van Burnham, celebrate a "visual history of the videogame game 1971-1984 [sic]", as the subtitle describes. Indeed, the visuals are unequalled in any medium. This romanticization of the hypnotic video game space sounds very much like the more academically

digestible romanticization of the cinema in Roland Barthes' "Leaving the Movie Theater", from *The Rustle of Language*. To hazard a few other hasty examples: early video games borrowed cinematic conventions, such as the film roll framing of the title screen in Konami's Castlevania on Nintendo's venerated NES system. Without beginning another paper altogether, it is worth noting that most Mario games (as well as a brilliant Sega Genesis title called Dynamite Headdy) give a fascinating nod to proscenium theatre, going so far as to incorporate theatrical objects into such objects indigenous to video games as the "life bar".

More ties to established culture: exhibits (justified by the associations of their space!) in galleries and museums recreate the nostalgia-based psychogeography of the arcade and offer encomia for video game artwork. This is true in Japan, as well, with the Tokyo Metropolitan Museum of Photography's installation, Level X. (http://www.syabi.com/level-x/) But most striking is how the games themselves have begun to represent leisure spaces in their own diagetic world. The nadir of this phenomenon may be the 3D museum-mimicking interfaces of the various next-generation console potboiler re-releases of entire classic game collections on a single disc. Other games, though, enter into a deeper dialogue. A particularly interesting example is SNK vs. Capcom: Card Fighters Clash on the marginal Neo Geo Pocket Color portable console. The game is a joint effort between two companies, SNK and Capcom, that were formerly considered rivals. It operates much like Pokémon in that it is a quest to "collect 'em all", but instead the player goes about collecting cards that make up a deck for a card game (itself a profitable ludic genre). This is already the subversion of a tangible activity into a portable game realm. Furthermore, the cards are made up of a pantheon of characters drawn from dozens of past games from both companies—a roll call of sorts. Knowledge of these games and characters actually is written into how these character cards work. Character dialogue is full of game references. New cards are available to your character from in-game pachinko and skill-crane payouts. Finally, all of these card battles (games within a game) take place in arcades in Osaka, Tokyo and even Las Vegas. Some of the actual locales are still extant. Card Fighters Clash serves as a catalogue of different arcade types, with faithful (though abstracted) representations of Japanese leisure space. It should also be noted that this card game created inside the diagetic world of the game was later marketed in the form of a tangible collectable card game.

What I find to be the most compelling example of games-representing-games is in the Sega Dreamcast game Shenmue, a flop in the United States save for a devoted niche. The entire flow of the game operates at an everyday, rather banal pace in a very convincingly rendered 3D representation of Yokosuka, Japan. Ryo

Hazuki, the protagonist, serves as a secondary interface to all sorts of ludic activities, from buying capsule toys to playing pool; narrative advancement isn't even necessary. Throughout the game Ryo can interact with jukeboxes—a nod to Sega's origins—and even other game consoles: Ryo can play an anachronistically located Sega Saturn (the game is set in 1987, about eight years before the release of the Saturn) in his home. Must stunning, though, is that he can drop into the "You Arcade", where two classic Sega games are represented as cabinets and are fully playable: Ryo inserts his virtual yen and the game screen switches jarringly to the title screen of the game he has selected, and the player presumably plays these games through the interface of Ryo. To conserve space I omit many fascinating details of the game's self-awareness, but this arcade is an honest representation; not only does Sega advertise their history via the arcade as some sort of ludic museum. They do so without ignoring the social affiliations of the space: foreign gang members use it as a hang out, while Ryo even must fight a freakish foe inside the arcade (the arcade operator acts as if nothing happened). This space is given fair weight as part of a leisure-based (if marginalized) identity of Japan.

LAYERS OF PARALLAX
In concluding remarks, I wish to divert briefly to one manifestation of identity that has come about as a result of the contents of arcade space—interestingly, a Chinese one. The painter and media artist Feng Mengpo has painted faithful representations of the ubiquitous Street Fighter II game with oil on canvas. More compelling than the transfiguration of the medium is that he replaces the game's very popular pseudo-Japanese main character, Ryu, with an absurdly Chinese character he calls "Wang," complete with a Red Guard cap. Sparing further analysis of the work, his work is informed by a medium now considered to be a Japan-centered product of globalization; his problematizing of national identity is expressed through a "fine art" mutation of a "banal" leisure activity. This implies, through his choice of a worldwide arcade hit, his own participation in these arenas. It is fitting to end with an artist's response to the video game environment; the inherent social criticism is a product of the power of leisure. Leheny concedes a certain trepidation in admitting his game-playing habits—somehow, indeed, a stigma has been placed on them that, perhaps is nullified to some by the presence of profit.

My confession is that I hope alternative histories to video games, paying attention to more pedantic matters and avoiding preoccupation with retro-fetishism, will allow for a new horizon (to borrow Dick Higgins' term) or *parallax* (my own) between the object and the subject. The Tokugawa patrons bewitched by the peep-boxes and the Los Angeles youth dancing the Dance Dance Revolution are both members of a leisure space that is subject to governmental control and to powerful cultural association. The histories of how these spaces lace

together provide rich insight to cultural practice and governmental policy. The makers of the game seem to be aware of this power and are even referencing it textually in the games themselves. Someday these games will be a for-granted component to an even larger history of some unknown permutation of leisure devices, but, until then, culture, historiography, and the games themselves deserve to the benefit of a shift in parallax.

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Note: much of the treatment of the peep-boxes are at the debt of Normon Bryson's lectures.