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Adaptation Theories

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Amy Herzog

Fetish Machines: Peep Shows, Co-optation and Technological Adaptation

Motion picture peep show booths, while hardly a new phenomenon in the mid-to-late 1960s, began to propagate during this period with newfound urgency. Coin-operated amusement centers had long included peep machines, stocked with mildly salacious "artist model" films, alongside games of skill and other novelties. In the 1960s, however, in response to a number of cultural and legal shifts, adult-oriented businesses, primarily in the form of "dirty" bookstores, took root in tenderloin districts across North America. To a large extent, the financial operations of these establishments received their primary source of profit from pornographic peep machines.[1]

"Peeping machines" were central to the development of cinema as a medium in the nineteenth century, and have persisted throughout the twentieth, existing primarily on the periphery of film culture as vehicles for pornographic content. What we find, in this example, is a most unusual form of filmic adaptation. Rather than a mere adaptation of content, the peep show booth was an exhibition format adapted from preexisting technologies, and redeployed in new commercial contexts. Alongside this technological

1 This research was supported (in part) by a grant from The City University of New York PSC-CUNY Research Award Program. Further assistance was provided by Albert Steg, the Kinsey Institute for Research in Sex, Gender, and Reproduction, and the Museum of Sex. I am grateful for the editorial advice provided by Jillian Saint Jacques and the anonymous readers for the press. See the report of the U.S. Commission on Obscenity and Pornography (1970), Volume 1, in particular the section on peep arcades (101–103).

adaptation, the adaptations of film texts in terms of subject matter and shooting style were accompanied by adaptations of the social spaces in which the booths were installed. This constellation of adaptive practices challenges traditional theories of adaptation in film, which have typically focused on issues of narrative content and fidelity. This study seeks to extend the boundaries of work on film and adaptation, motivated by two key questions: how might one theorize the adaptation of filmic technology, and how might instances of pornographic adaptation complicate adaptation theory in general?

The pornographic peep industry of the 1960s and 1970s was managed by regional entrepreneurs. These purveyors operated franchises of machines that varied widely in terms of design, gauge and interface. Nevertheless, certain types of peep machines were commonly found during this transitional period, before the widespread conversion to privatized booths with closing doors. The early machines were comprised of large, solid wooden cabinets (approximately 6½ feet tall) outfitted with a binocular viewer. The interior of the machines contained a 16mm (later, an 8mm) projector, triggered by a timer or notches on the edges of the film, and a continuous film loop. The exterior prominently featured a coin drop slot, and with some models, space to display promotional pictures for the films contained within. Operators began adding "blinders" or privacy shields to the sides of these machines as the arcade format became more established. These shields were

intended to block the customer's immediate view of the booths and patrons on either side, but the privacy they offered was minimal at best. The body of the "peeper" was fully exposed within these early arcades; accounts of peep venues in the late 1960s and early 1970s describe charged scenes in which patrons moved with deliberate casualness in and out of the passageways, drifting from booth to booth, their studied behavior speaking to the surveillance of other customers as well as the ever-present policing of the management.[2]

The origins of the early pornographic motion picture peep show machines are poorly documented, and subject to much mythologization. Despite the decentralized nature of the industry and the significant dissimilarities between peep machines in different geographical areas, popular narratives regarding the invention of the peeps follow a nearly identical trajectory. In these narratives, a forward-thinking individual encounters an outmoded coin-operated movie machine, realizes its prurient and profit-making potentials, and adapts the technology

2 A number of sociological studies were conducted in urban peep arcades in the 1970s, several in conjunction with the U.S. Commission on Obscenity and Pornography. These studies provide some of the most detailed accounts of the arcades on record. For several representative examples, see Karp (1973: 427–451), Nawy (1973: 147–161), and Sundholm (1973: 85–104). West 42nd Street: "The Bright Light Zone" (1978) is an extensive study of the Times Square district conducted by the CUNY Graduate Center, under the direction of William Kornblum, and offers an invaluable overview of the operations of the arcades.

to show pornographic films.[3] This study will explore one example of this type of entrepreneurial adaptation: the case of the "Soundies" Panoram musical film jukeboxes, which were converted into peep show booths throughout the 1950s and 60s. My objective in taking on this anomalous case study is to explore new ways of theorizing the adaptation and evolution of media technology. In particular, and in contrast to studies that center on the "successful" and "productive" adaptations of technology in the commercial marketplace, I will focus here on technologies that are outmoded, discarded, and later co-opted for pornographic, or otherwise illicit purposes.

My interest in the peep show machine in relation to adaptation theories is threefold. First, I hope to expand discussions of film and adaptation beyond a limited focus on the movement of narrative content across different media, such that we might think about the adaptations of media technologies themselves. To extend our understanding of adaptation in this manner is to view cinema not as a text, but as a temporally- and spatially-based coincidence of filmic content, mechanical apparatus and social context. The notion of adaptation, in this sense, would not be limited to the individual translation of a narrative, but would encompass the mutual and contingent evolution of technologies, texts and environments.

My second goal is more pragmatic: to explore the evolution and operations of the peep show arcade as an understudied phenomenon. Virtually no work has been published on the pornographic peep arcade in

the fields of film or pornography studies.[4] While a number of sociological studies of adult bookshops and peep arcades were conducted in the 1970s, often in the context of urban planning initiatives or as contributions to the U.S. Attorney General's reports on pornography, few scholars have approached the arcades from a cinematic perspective. I am interested, in this context, in examining the development of the peep show booth from earlier, non-pornographic motion picture formats. My hope is that a map of the peep show's genealogical descent may reveal something of the origins of its unique modus operandi.

Finally, while the technological focus of this study is highly specific, and indeed somewhat idiosyncratic, one of my larger objectives is to suggest that anomalous, outmoded, and recycled media technologies play a critical role in the evolution of larger media ecosystems. Histories of technology tend to focus on teleological progress, proliferation, increased performance, and productivity—all signs of an evolutionary

3 Examples of such entrepreneurs include Martin Hodas, the "peep show king of 42nd Street," Michael Thevis, based in Atlanta, and Reuben Sturman, operating from Cleveland. On Hodas, see Bianco (2004: 157–180). On Sturman, see McNeil and Osborne (2005: 104–110) and Schlosser (2004: 128–132). On Thevis, see the U.S. Attorney General's Commission on Pornography (1986), Part Four, Chapter Four: Organized Crime. Much of what survived the 60s did so in forms that could be assimilated by the status quo" (Lewison 32).

4 See Herzog, "In the Flesh" (2008: 29-43) for a more expansive study of the design and politics of the 1960s and 1970s peep arcades, and a literature review of the existent work on peep shows.

"success" rooted solely in profitability.[5] What might we gain by examining the genealogy of media detritus, technologies that have not "progressed" or flourished according to prevailing market standards, yet have continued to survive within marginal or niche subsystems? What frameworks might prove useful in examining the co-optations of "non-vital," vestigial commodities?

The adaptation of the film jukebox into the peep show booth does not fit within any standard models of adaptation and the arts. Nevertheless, we might speak about the transition between these formats as a kind of parasitic, mutually transformative inhabitation. The practice of inhabitation, while perhaps distinct from a technical instance of adaptation, might still be understood in relation to various adaptation theories. In particular, I will suggest that evolutionary biology provides a provocative model for thinking about the ways in which outmoded technologies metamorphose and persist at the margins of commodity culture. I will point to the ways in which the notion of parasitic inhabitation sheds light on the myriad ways in which various populations make use of outmoded technologies, toward divergent ends.

The adaptation of technology by the pornography industry is fundamentally distinct from other instances of technological recycling. Outmoded technological formats are often integrated into new industrial practices, or enjoy an afterlife as collectibles within second-hand markets. Yet pornographers scavenge abandoned technologies with little concern for their

original function or history; the machine becomes merely a means toward an end, a vehicle reincarnated within a pornographic economy. The rupture of the technological life cycle within the "legitimate" economy represents a hijacking, a parasitic co-optation. This co-optation is ubiquitous enough to seem banal, yet it is a complex and under-theorized practice. There is a curious interdependency between the technological vehicle and the pornography that inhabits it, as well as between the larger commercial spheres in which they operate. The detritus of the "legitimate" economy provides fodder for a subterranean one; a relationship that is only tacitly acknowledged, and which is often mutually beneficial. In the same way a parasite adapts to the parameters of its host, pornography adapts to, and takes on the form of its technological container. The conditions of the environment and the design apparatus provide for the possibility of this infiltration from the outset. At the same time, this process of a foreign inhabitation transforms and challenges the terms upon which the original system operates.

This essay will suggest that the model of the parasite presents a provocative means of rethinking the process of pornographic adaptation in general, and the

5 In particular, I am responding here to work in the field of technology transfer, which centers on the successful adaptation of technology and information across national, institutional and economic boundaries. For an overview of the history of technology transfer, see Seely (2003: 7–48).

pornographic adaptation of technology in particular. If the commercial media sphere represents an ecosystem of sorts, the detritus of this system, its rubbish, is often processed and recycled for pornographic distribution. While this activity might be dismissed as culturally marginal, its economic force is significant. In fact, the kinds of mutual transformations that occur through the process of pornographic adaptation have much to say about the wider climate of a specific cultural moment. These transformations are evidenced not only within the content of the media, but in the social contexts in which such technologies were used. Beyond the adaptation of a singular text, or indeed of a singular machine, I seek to explore the systematic transformation of public spaces into arcades of illicit commerce. By repositioning individual coin-operated film machines into peep booth arcades, for example, peep show operators set the stage for contingent types of social occupation, as I assert below.

The remainder of my study will be divided into six sections. In the first, I introduce points of correspondence between biological and cultural forms of adaptation as they have been aligned in narrative studies. The second section outlines the historical conversion of the Panoram film jukeboxes into pornographic peep show booths. Subsequent sections make the case for my adoption of a "parasitic inhabitation" model, and detail the parasitic mode specific to pornographic adaptation. The final section briefly suggests that this inhabitation model might be

expanded to consider the peep show's spaces of production and exhibition. Thus, the notion of inhabitation or occupation analyzes not only the ways in which pornographic films took up residence within film machines, but the movements and agendas of customers within peep show arcades, and the strategic, if partial, manner in which female performers, in certain loops, work to challenge hierarchies of visibility and control.

Theories of Cultural Adaptation

In an essay on narrative adaptation, biologist Gary R. Bortolotti and literary theorist Linda Hutcheon argue that adaptation criticism must move beyond a limited, evaluative discourse predominantly focusing on questions of fidelity (one that seeks to determine which adaptations are "good" or "faithful"). Invoking theories of evolutionary biology, they suggest a descriptive discourse focused on mapping the descent of adaptations of cultural narratives. Stressing that their use of biological terms is not metaphorical, they propose a heuristic homology between adaptation in the natural and cultural realms. "We are not saying that cultural adaptation is biological," they write; "our claim is more modest. It is simply that both organisms and stories 'evolve'—that is, replicate and change" (2007: 446).

Adapting terminology from the work of evolutionary biologist Richard Dawkins, Bortolotti and Hutcheon note that successful adaptation in the

biological world hinges not upon the survival of an organism or species per se, but on the survival of certain "replicators"—genes, for example, that serve as "units of selection" (447). The living organism, according to this rationale, exists as a vehicle for the replicator, ensuring its preservation. For Bortolotti and Hutcheon, the replicator in cultural theory is found in the "core narrative idea" that is borne out in the vehicle of a cultural text, the physical embodiment of an adaptation—a literary adaptation, a film, a performance, a video game or breakfast cereal (447).[6] Thus, a distinction is drawn between adaptations-as-products (vehicles for narrative), and adaptation-as-process (the process through which replicators undergo transformation as they move between various vehicles). The cultural environment in which adaptation-as-process occurs plays a pivotal role in influencing the process of selection, in much the same way that the physical environment has a hand in biological evolution. A new theory of cultural adaptation might, then, set aside questions of fidelity to evaluate the ways in which specific narratives proliferate and persist in adapted forms while others fade from view. One might further examine the diversity of narrative adaptations, or interrogate the ways in which adaptations mutate within new technological mediums. Key to this theory is shedding light on the connections between adaptive phenomena and a wider cultural context, both in terms of the influence of environment on the process of adaptation, and the cultural impact of the adaptation-as-product.

This provocative approach, introduced in Hutcheon's earlier book, *Theory of Adaptation*, opens many new avenues for understanding the complex history of narrative adaptation across a diverse range of media. Yet the model of narrative-as-replicator or text-as-vehicle offers little room for consideration of the adaptations of media technologies. In this formulation, a film machine would not even be considered a vehicle. Moreover, while individual films might act as vehicles for recycled narratives, the machines for their conveyance seem relegated to the realm of cultural environment. Thus, there appears to be an impasse in terms of simultaneously considering adaptation processes on the level of content and format together. Following a model of replicator and vehicle, one is left to map shifts in diversification taking place sheerly on the level of that internal element, the replicator. In viewing transformations taking place on the level of the format, where the medium serves as the vehicle or "shell" for cultural content, the process of evolution becomes far more diffuse and difficult to map. For Dawkins, the model of the cultural replicator is based on a system in which a "meme" or "unit of cultural transmission" is subject to change as it migrates and responds to external

6 Elizabeth Grosz presents a nuanced political critique of Dawkins's "selfish gene" theory, and other approaches that universally posit an active gene over a passive organism (2004: 79–82). We might ask whether Bortolotti and Hutcheon's privileging of the narrative-replicator model might similarly downplay the degrees to which narratives are subject to the whims of their vehicle-hosts.

conditions (1989: 192). Yet, if content and form can mutate in the same breath, as was the case with the pornographic peep arcade, is it truly possible to isolate a singular internal meme? In such an instance, it may prove more productive instead to view this type of adaptation as a point of collision between diverse but interdependent constellations of memes. Rather than performing a transformation on the level of a singular meme in any discreet technological adaptation in pornography, what we witness is a foreign infiltration, a conflict between competing assemblages of form and content.

In such instances, form and content can indeed be viewed as a unified system, however fragile. A machine such as the film jukebox exists within a wider media ecosystem, experiencing adaptations in filmic content and in the shape of its apparatus based on the material conditions in which it thrives. When this system is adapted toward pornographic use, however, the impetus for change is not generated internally, but is imposed from the outside. The apparatus-shell of the machine is hijacked toward this new end in much the same way that a parasite manipulates its host for its own purposes. As in Hutcheon and Bortolotti's formulation, this adaptive process is utterly contingent on its environmental purposes. The change speaks to a wider network of competition within the system, and reflects the interconnected mutations of disparate entities with conflicting interests; in the case of the peep show machines, these include a broad spectrum of

players, including zoning regulators, pornographic film producers, bookshop owners, politicians, and the diverse communities of urban dwellers who traversed these spaces. To illustrate precisely how such a process of parasitic adaptation might unfold, the following section details the peculiar evolution and history of the motion picture peep show machine.

From Jukebox to Peep Show

In 1940, the Mills Novelty Company, a Chicago-based business dealing in a diverse catalog of coin-operated vending and entertainment machines, released the Panoram motion-picture jukebox.[7] The Panoram contained a 16mm film projector, an amplification system and a large, ground-glass screen, on which a three-minute musical short was rear-projected for each ten cents deposited. Each machine was loaded with a continuous reel of eight musical films, known as "Soundies," drawn from a range of musical genres. Because the film loop was continuous, the Panoram did not offer customers the option of selecting a particular number; viewers would simply watch whichever film short was next on the reel, or continue depositing coins until their chosen song made its way around the loop. Perhaps for this reason, the Soundies catalog covered a wide spectrum of styles: big band swing, hillbilly acts,

7 For a more detailed history of the Panoram, see *The Soundies Distributing Corporation of America* by Terenzio, MacGillivray and Okuda (1991).

comedic novelty numbers, patriotic songs, Irish, Latin, Hawaiian and other regional music, and burlesque acts. Loops would typically contain selections from across the catalog, presumably to appeal to as diverse an audience as possible. Panorams were sold to a variety of venues across the United States, most typically restaurants, bars and transit stations (Terenzio et al 1991: 2).

Although Soundies are often cited as precursors to the music video, these films differ from later musical shorts in terms of both production history and aesthetics. The production budgets for Soundies were miniscule, and shooting schedules were severely limited. These productions appeared to have few direct ties to the mainstream music or film industries, and theater owners feared the Panoram was a direct threat to their businesses (Terenzio et al 1991: 10). Unlike music videos, which are explicitly created in collaboration with record labels as promotional tools, Soundies were stand-alone productions that more frequently depicted renditions of standards or original numbers, as opposed to contemporary hits. Soundies nevertheless did feature major musical stars, as well as performers who would achieve fame later in their careers; notable Soundies artists include Louis Armstrong, Cab Calloway, Nat "King" Cole, Spike Jones, Dorothy Dandridge, Duke Ellington and Stan Kenton. To offset the cost of booking premier acts, the production schedules of the Soundies would be rounded out with lower budget novelty acts or in-house musicians.

The minimal budgets and industrially marginalized status of the Soundies industry is evident in the shorts themselves. Like most musical films, Soundies were shot using playback, with the performers miming to prerecorded music tracks. The linking of tracks was not always successful, however, and in many Soundies the performers stumble in and out of synch. The artistic direction was typically bare bones, with sets based on the generic themes of the songs (e.g. barnyards for country numbers, club settings for big bands). In most Soundies, dancers would accompany the performances during musical bridges or solos; in many such sequences, women in skimpy outfits would decorate the set, holding props or bending over suggestively, depending on the demands of the songs. The visualizations of the music most often resorted to the most literal interpretations of the lyrics possible, in many instances swerving into the realm of the "corny," clunky—or at times outright baffling. In many Soundies, the pressure to "spice up" numbers with scantily clad dancers appears to transcend musical style or subject matter, and might suggest that the target audience for the format was predominantly male. Indeed, one of the more established Soundies genres was comprised of burlesque novelty numbers (see, e.g., "Fan Dance" [1942] with Sally Rand, "Cocktails and Oo La La" [1946] with Carolyn Gray and Tari Vance, and "Dance of Shame" [1942] with Faith Bacon).[8 (p. 61)]

From the outset, the operations of the Soundies Distributing Corporation of America were plagued

by financial difficulties.[9] Interest in the machines never matched the ambitions of their creators, and although the premier of the Panoram was treated with some initial fanfare by the press, the novelty of the device ultimately failed to maintain interest among large audiences. The production of shorts remained steady through 1946, buoyed by novelty acts and burlesque numbers, but audience interest in the format had by then been depleted, and the servicing of Panoram machines ended in 1947 (Terenzio et al 1991: 10-16). The film loops that were removed from the Panoram machines, however, enjoyed a fairly rich afterlife. The films were purchased by several small distributors to be sold on the home market; collectors continue to buy and trade Soundies, and many have now been converted and compiled for sale on video.

Numerous Panoram machines persisted, as well, and while one may still encounter intact machines in antique stores or private collections, the vast majority were recycled in a manner divorced from their musical origins. Although it is difficult to definitively isolate the moment at which the majority of Panorams were converted into pornographic peep machines, photographs of old Panorams fitted with peep viewers and ambiguous signage ("For Art Students Only!") date to at least the early 1950s. The fossils of these transformations can still be found on sites such as eBay, and one expert in the restoration of Panorams reported that nearly every machine he has encountered had been converted to a peep show machine.[10]

In the conversion process, the audio speakers for

the machines were removed to make room for larger coin receptacles. The large glass screens were boarded over and fitted with binocular viewers focused on the reflected image inside. In these early conversions, there were no shielding devices intended to protect the privacy of the customer. While the films created for such machines most likely reflected a range of subject matter and levels of explicitness based on regional regulations and tastes, the vast majority appear to have consisted of strip teases (some with full frontal nudity) and occasional soft-core pseudo-lesbian encounters.[11] By and large, it was not until the late 1960s that hardcore sexual content and all-male film loops entered the realm of the peep booth.

8 The SDCA was the distribution office for Soundies films, part of the Mills corporate family (Terenzio et al 1991: 2–3). For an extended discussion of Soundies aesthetics, see Herzog, "Illustrating Music"(2007: 30–58). Many Soundies are now available on DVD compilations; Something Weird Video offers a collection of the more provocative titles, entitled *Soundies Vol. 1: Music With Spice.* A large number of Soundies are also viewable online, on sites such as The Internet Archive (<http://www.archive.org>) and YouTube (<http://www.youtube.com>).

9 During WWII, supply shortages severely curtailed the production of new Panoram machines. In 1942, a strike by the American Federation of Musicians banned the recording of performances by union members (Terenzio et al 1991: 12–14).

10 Larry Fisher, telephone conversation with the author, 6 March 2007. Many thanks to Mr. Fisher for his generous assistance with this research.

11 I have not discovered any male peep films from this era, but given the lack of reliable archival data regarding peep films, there is no indication that such films do not exist.

And indeed, it is this transformation of the Panoram format in the late 1960s that most resembles a parasitic infiltration. In 1966, Martin Hodas, later known as "The Peep Show King of 42nd Street," was servicing coin-operated jukeboxes and vending machines throughout the tri-state New York area. During a stop on his route in New Jersey, Hodas discovered a converted Panoram-style machine fitted with a strip-tease dance loop. Recognizing an untapped potential, Hodas purchased several of the machines and installed them, in 1967, in an adult bookshop on West 42nd Street (Bianco 2004: 162-3, Herzog 2008: 31-32). The booths were an immediate and overwhelming success; Hodas quickly built an expansive empire installing, servicing and stocking the machines with film loops. He launched a production company, Dynamite Films, to shoot increasingly explicit loops, and expanded his franchise, East Coast Cinematics, as far south as Atlanta. Hodas became notorious in the 1970s for his refusal to back down to obscenity and zoning regulations, and his legal savvy in defending the rights of adult-oriented businesses to operate in city centers. His peep show franchise and his victories against obscenity regulations were instrumental in the transformation of the Times Square area into a pornographic phantasmagoria.[12]

The adaptation of the Panoram proceeded at a rapid pace during this transitional period, but the machines soon hit the end of their life cycle in their new environment. The Panorams were heavy and cumbersome, and their antiquated mechanics were not able to keep pace with the fresh surge in viewership. The largest obstacle proved to be the size of their coin box, which could not accommodate the influx of money being deposited. The Panoram shells were soon abandoned, replaced first by smaller 8mm and Super 8 cabinets, later by private booths, and still later by video decks, monitors, or (in their current incarnation) shared hard drives. Yet the structural layout of the arcades that the Panoram helped to establish ultimately persevered. And while the physical body of the Panoram machine was eventually discarded, its essential elements were replicated in each of the peeping devices that followed—the promise of a novel, pleasurable physical encounter, a moment in time encased in a sealed container, always accessible with the insertion of just one more coin.

Pornography and Adaptation

There is a degree to which the story of the conversion of the Panoram machine is utterly mundane. It is somewhat of a truism that any new technology, particularly a visual technology, will immediately be adapted for pornographic uses. The larger history of pornography is indelibly linked to the history of

12 See Bianco (2004: 157–180) for a thorough account of Hodas's career in the peep industry. I would like to thank Mr. Hodas for speaking with me about his discovery of the Panoram, and the conversion process (telephone conversation with the author, March 2007).

modernity, and its evolution closely follows advancements in technology, science, political criticism and philosophy (see Hunt). Scholars have written much about the adoption of explicit subject matter in the early histories of the novel, the photographic camera, the stereoscope and the mutoscope.[13] Although it is seldom advertised as such, pornography is an enormously profitable branch of the media industry, and has played an influential role in the evolution of various technologies.[14] Indeed, pornography appears to be the most highly adaptive of all modern cultural forms, occupying commercial niches within many new technological venues (video, the Internet, portable and cellular media devices) long before the "legitimate" media industry is able to develop stable business models for the same mode of delivery. In addition, porn is adept at adapting literary, filmic and televisual narratives almost as soon as they appear on the market, as evidenced by even a cursory look at any adult film catalog (see, e.g.: *Gilligan's Bi-Land* [1994], *Driving Miss Daisy Crazy* [1990], *White Men Can't Hump* [1992], *Edward Penishands* [1991], *Lord of the Cock Rings* [2002]).

In terms of availing itself of technological advances, there is ample evidence that the pornographic adaptation of the film jukebox was not merely one isolated incident, nor was it a limited enterprise. In fact, the conversion of Panorams was widespread, and seems to have emerged simultaneously in locations across North America—and to have begun many years prior to Hodas's encounter with the equipment.

In their original incarnation, Soundies and other jukebox shorts incorporated veiled prurient content, making the transition to full-fledged pornography fairly obvious. As early as the 1940s, in their legal attacks against the Panoram as a threat to the operations of the traditional cinema house, theater owners decried the ability of the Panoram machines to be outfitted with "adult entertainment," suggesting that the notion of loading Panorams with independently produced, salacious films entered circulation well before the collapse of the Soundies enterprise (Reuter 1941: 107; Terenzio et al 1991: 10).

Clearly, the conversion of Panoram jukeboxes into peep show booths cannot be discussed using traditional models of film adaptation, which typically focus on the artistic merits of works that have been

13 On the history of pornography in relation to modernity, see Hunt (1993: 9–45). On the stereoscope and the "decentered observer," see Crary (1990: 127–136). On mutoscopes, adult material and debates regarding youth access to visual technologies, see Streible (2003). See also Williams for a discussion of the pornographic film's "prehistory" (1989: 34–57).

14 Although the claim has been disputed by media critics, some have argued that the "format war" between Sony Betamax videotapes and JVC VHS in the 1980s was resolved based on the availability of porn on VHS, which trumped the superior visual quality of Betamax (see Johnson 1996). Journalistic coverage of the recent format battle between Sony Blu-ray and HD DVD directly echo those earlier debates (See Gonsalves 2007). While the porn industry most likely did not single-handedly determine the victory of the VHS format, it most certainly contributed to the financial success of the home video industry, and as Williams notes, may have shifted the gender demographic of pornography audiences in a more inclusive way (1989: 231).

translated from one media format to another. The role of the individual artist looms large in such models; it is the artist who initiates and guides the process of transformation, and the relative success or failure of the act is determined by evaluating his or her interpretation as manifested in a singular product. The transition between the formats of the film jukebox and the peep show booth, conversely, appears to have been diffuse, and to have occurred gradually, rather than resulting from an individual act of "translation" or an orchestrated conspiracy between like-minded entrepreneurs. Moreover, the adaptation of the machines from "legitimate" to pornographic purposes is complicated by the germs of prurient content that were present within (and associated with) the film jukebox format. While the pornographic adaptations of texts and technologies are typically framed as deviant or perverse misappropriations, the pornographic offspring of the Panoram seems to follow an established genealogical thread.

How, then, might one make sense of the evolution of the peep show machine in relation to theories of adaptation? Rather than following a model of adaptation based on a singular act of artistic translation, Bortolotti and Hutcheon's paradigm of cultural adaptation offers a more productive means of understanding the means by which technologies might be adapted for alternative uses. In much the same way that evolutionary biology has rejected simple teleological models of "progress" through its increasingly sophisticated observations about biological diversity

and the processes of selection, one might consider the ways in which cultural adaptations are subject to a wide variety of forces (economic, social, geographical, natural and ideological), each impacting the shape of new transformations. Cultural evolution is rarely linear, but proceeds in branching and often unanticipated directions. This approach further de-emphasizes the role of individual agents in instigating change (what Basalla calls the "heroic inventive genius") in favor of mapping diffuse genealogical links (1988: 208–9).[15]

As productive as Bortolotti and Hutcheon's formulation is in decentering the role of the individual in the adaptive process, and in circumventing debates about fidelity, it remains somewhat limited in its ability to contend with adaptation beyond the scope of narrative or content. As mentioned above, their discussion of replicators and vehicles does not easily accommodate adaptive shifts in medium or technological format. One might also argue that instances of pornographic adaptation would be difficult to frame

15 The fields of evolutionary technology studies and evolutionary economics offer some fascinating models for thinking about the evolution of human technological forms according to the principles of evolutionary biology. For an introduction to the history of debates within these fields, see Basalla's *The Evolution of Technology* (1988), Ziman's "Evolutionary Models for Technological Change" (2000: 3–12), and Dew, "Pre-Adaptation, Exaptation and Technology Speciation" (2007: 155–60).

within Bortolotti and Hutcheon's model; while the narrative adaptations they discuss are highly contingent upon local conditions, pornographic adaptations remain relatively fixed in terms of content and theme. In other words, while the cultural adaptations Bortolotti and Hutcheon describe lead toward increased diversity as narratives circulate between disparate cultural locales, pornographic adaptations typically reduce a diversity of cultural products to the same well-worn "plot." While the content of pornographic adaptations is, of course, still subject to its cultural context, it seems that the same biological model of adaptive diversification may not apply in this instance. Is it possible, then, to extend a theory of adaptation based in evolutionary biology into the realms of technological or pornographic adaptation?

Scavengers, Vampires and Parasites

Noting that adaptations have both a subversive potential and an "infective power," Linda Hutcheon does set certain limits in terms of what types of works can be considered adaptations:

> An adaptation is not vampiric: it does not draw the life-blood from its source and leave it dying or dead, nor is it paler than the adapted work. It may, on the contrary, keep that prior work alive, giving it an afterlife it would never have had. (2006: 176)

But the pornographic co-optation of the Panoram machine surely was vampiric. All vestiges of the Panoram's former musical life were cast aside, while its corpse was inhabited by a new, single-minded entity bent on its own transmission and survival. Or perhaps it would be more accurate to say the Panoram itself became a discarded shell, a fossil left behind by a fickle media industry, a cast-off technology the pornographic trade subsequently scavenged and reanimated for its own illicit purposes.

There is an established lexicon for discussing the successful evolution of "legitimate" technologies, a vocabulary centered on issues of profitability, commercial viability, and propagation across various institutional, national and market-based boundaries. What does it mean, however, to talk about "thriving" in the context of pornographic media? Profitability is typically assumed (as in "sex sells"), but this is rarely considered a positive attribute. More often, the social ills associated with commodified sex are reframed using parasitic metaphors, wherein pornography infiltrates communities like a virus, vermin or weed. Pornography is presented as ubiquitous, tenacious, threatening to choke out or infect the healthy regulated economic system into which it is introduced. In fact, a survey of journalistic reportage covering the growth of porn shops and peep arcades reveals a preponderance of such metaphors. Peep shows were said to "proliferate" in tenderloin districts, while court decisions loosening obscenity restrictions unleashed

an "invasion" of organized crime and commercial sex operations, resulting in what Time magazine called a "porno plague" (see, e.g. Brady 1969: 50 and "Porno Plague" 1976).

Ultimately, there seems to exist a relation of codependence between the pornographic and "legitimate" media industries. This dependence often takes the form of a co-optation in which rogue pornographers adapt preexisting media formats. How might we distinguish this type of recycling and reuse from other forms of cultural co-optation, and how does the cooptation of the Panoram adhere to or deviate from these models?

Michael Thompson, in his 1979 study *Rubbish Theory*, notes that commodities tend to cycle through three categories of relative value: durable objects (commodities whose economic value is seen as increasing over time), transient objects (limited lifespan commodities whose economic value is decreasing), and rubbish (objects whose cultural or monetary value has decayed entirely). Rubbish theory grounds itself in the disconnect between the rates of economic and material decay in the life of commodities; while the monetary value of a transient object may quickly approach a zero point, its physical being nevertheless persists, transformed into rubbish. As Thompson notes, objects that become rubbish enter into a marginal realm of suspended temporality where they may be rediscovered and gain a new cultural—and subsequently economic—value. This is the means by which discarded commodities are

reborn as antiques or collectibles: they must enter into an obligatory waiting period as rubbish.

Igor Kopytoff has argued that the movement of commodities into and out of the active sphere of exchangeability manifests itself in a process of "singularization":

> Commoditized things remain potential commodities—they continue to have an exchange value, even if they have been effectively withdrawn from their exchange sphere and deactivated, so to speak, as commodities. This deactivation leaves them open not only to ... various kinds of singularization ..., but also to individual, as opposed to collective, redefinitions. (1986: 76)

As a commodity loses its value as an object of exchange, becoming, as Kopytoff puts it, "deactivated" within the contemporary capitalist marketplace, the value associated with the commodity is stripped away, and it becomes a mere object or thing. As these objects accumulate in attics and garages, sift into secondhand shops and antique stores, or flourish within online arcades of sites such as eBay, they are subject to a cultural repositioning. They begin to amass a certain singular value in terms of nostalgia, although these values are open to greater and more personal fluctuations than those of "active" commodities.

In a contemporary context, the "deactivation" of Panoram jukeboxes subjected them to precisely this kind of redefinition. A brief perusal of the rhetoric used to describe Panorams on websites written by Soundies enthusiasts reflects this cultural reinvestment, as do the high auction prices fetched by the rare Panorams that make their way onto the market. The pornographic "reactivation" of the Panorams in the 1950s and 60s, however, was not greeted by such nostalgic enthusiasm. Nor was there a singularization of the technology, such as is often the case with antiques or devices that are revalued within the realm of retro-kitsch. In the case of the Panoram peep show conversions, the machines were simply impassive, invisible vehicles for the films they contained. This is evidenced by the fact that the individuals who converted these machines did so with little sentimentality—or knowledge of—the history or functionality of the original machines. Instead, refitted Panorams simply provided a means toward an end (making an easy profit). Similarly, users of the machines ostensibly interacted with the technology not for the sake of nostalgia, but to avail themselves of the machine's content, and most likely were uninformed about the Panoram's cinematic origins. The technology now served a tightly delineated purpose ("getting off"), or lay at the center of a social space that could be occupied for other purposes (cruising, soliciting, scoring drugs), each goal seemingly distinct from the objectives of the original motion picture machines. Rather than

being singularized and valorized as a semi-precious media byproduct, the conversion of the Panoram for pornographic purposes appears to have been completely pragmatic and oblivious to any charms the machinery itself might hold.

Such a distinction may have to do with the transient cultural status of the object itself as it shifts from one era to the next. In the process of singularization, the rubbish-object, a former means-to-an-end (a sale) becomes fetishized, gaining a new value that has less to do with its active use-value and more to do with its representational or symbolic value. In the case of recycling Panorams, however, the rubbish-object is not subjected to a process of fetishization (its fetishization will occur later, when the machines are once more reduced to rubbish when they outlive their usefulness within the peep industry). In its new incarnation, the Panoram as rubbish-object becomes parasitically inhabited as a semi-transparent means-to-an-end, valued not for its aesthetic value as a nostalgia object, but as a tool towards achieving a different fetishistic objective (making a profit/getting off).

The process of pornographic recycling deviates from the traditional trajectory of cultural objects in a capitalist system. With pornographic recycling, certain technologies, products, or narratives are hijacked from their normal life cycle, and are reappropriated for unsanctioned usage. I would liken this process to the behavior of hermit crabs, "scavengers and detritus feeders" who scour shorelines seeking abandoned shells to inhabit, devouring, for their

survival, carrion, fecal matter, rotten vegetation and the "decaying stomach contents" of deceased animals (Grubb 1971: 411–2). The seeming ubiquity of the pornography industry might be tied to its similarly catholic feeding habits; few technologies, genres, narratives, character-types, or scenarios have remained untouched by pornographic consumption. Hermit crabs' own bodies have adapted to maximize their ability to fit into the discreet shape of their diverse salvaged homes, as paguroidea are known to inhabit a variety of material forms with equal ease. In much the same manner, pornographic media retains a remarkable malleability and resiliency in its repossession and occupation of new technological venues. Unlike the revaluation and singularization of rubbish proposed by Thompson and Kopytoff, in the case of pornographic scavenging, the technological rubbish-object is merely a temporary venue for the insertion of an alien value system.

Counterpoint and "Libidinal Parasites"[16]

By evoking scavenging decapods as an adaptational model, my aim is not simply to point to the opportunistic modality of the pornographic industry, but, in a larger capacity, to stress that cultural evolution in general should not be viewed as a strictly internal process. Rather, cultural evolution always occurs in interaction with the outside; a mutual process of intervention and

16 See Pasquinelli (2007).

co-optation. Gilles Deleuze and Félix Guattari, in their discussion of the linkages between philosophy and art, nature and culture, similarly describe the intersections between diverse territories as a type of counterpoint, particularly as this relates to cases of interspecies adaptation. This counterpoint emerges "whenever a melody arises as a 'motif' within another melody, as in the marriage of bumblebee and snapdragon. These relationships of counterpoint join planes together, form compounds of sensations and blocs, and determine becomings" (1994: 185).

Deleuze and Guattari focus on the social and political alliances that occur between species, and between species and environments, concentrating on the complex diversity of contingent "compounds" rather than on the transformations of an individual organism. Often, these biological examples take a parasitic form:

> On the death of the mollusk, the shell that serves as its house becomes the counterpoint of the hermit crab that turns it into its own habitat, thanks to its tail, which is not for swimming but is prehensile, enabling it to capture the empty shell. The tick is organically constructed in such a way that it finds its counterpoint in any mammal whatever that passes below its branch ... (185)

When such instances of counterpoint extend into larger compositions of sensation, Deleuze and

Guattari suggest, they open to the forces of the outside, in much the same way that artistic composition builds itself through minute combinations of diverse elements into broader compositions that have the potential to unlock new territories.

Although commercial pornography is not typically viewed as an artistic practice per se—and indeed has often been legally defined by its lack of "artistic value"—I would argue that the notion of a highly contingent, adaptive and scavenger-like modality is the best means by which to understand pornography's modus operandi in infiltrating and proliferating within the media ecosystem. The phenomenon of cultural co-optation must always be situated in a social context, and the act of recycling is always part of a compound, contingent and temporary alliance of diverse elements. In the realm of biology, the scavenger is not merely a scourge, but plays a significant role in the operations and survival of the larger environment. Might, then, the pornographic scavenger be read as a productive and necessary component of the larger media sphere? While this is a complex question that extends far beyond the scope of this study, we might begin to address it in the context of peep show culture, considering not what the pornographic conversion of film machines destroyed, but rather what this act produced.

Strategic Inhabitations

The pornographic adaptation of the Panoram machine, as outlined above, can be seen as a type of entrepreneurial parasite. By means of a conclusion, I will briefly outline some of the ways in which the initial adaptation of the Panoram into peep show arcades resulted in corollary adaptive behaviors. These strategic adaptations took place on a multitude of registers beyond the technological, extending into the space of consumption, within the arcade, and, in the context of production, into the space of the filmic text itself.

In the 1960s and 70s, the topography of the peep show arcade was adapted and occupied by a number of individuals and groups for diverse, and at times subversive, purposes. The most significant of these involves the usage of peep show arcades as venues for men seeking live sexual encounters with other men. During the birth of adult-only peep arcades in the 1960s, gay male culture was marginalized in both rural and urban locales, and subject to an extraordinary amount of repression and policing. While the adult bookstores of this era did not typically cater to an exclusively queer clientele, nearly all of them offered a diverse range of pornographic products, including all-male and fetish-related products.[17]

17 See Herzog, "In the Flesh" (2008) for a more detailed discussion of the sociology and regulation of peep arcades. My discussion of queer appropriations of the peep arcade is a summary of the points made in that article.

Sociological studies of peep show arcades noted their popularity as cruising sites, as well as impromptu workspaces for prostitutes, hustlers and drug dealers. As the designs of the peep booths and the layout of the venues evolved, increased privacy afforded opportunities for increasingly intimate and sustained exchanges between customers. Typical regulation of peep show arcades, throughout their history, limits itself to rules regarding lighting, non-locking doors, the width of passageways and prohibitions against "glory holes" through which sexual contact might take place. Regulators, it seems, are more concerned with policing public sexuality than with monitoring the content of the films that are screened in such venues, indicating that one of the primary threats a peep show format poses to the larger social order has to do with the space it opens for illicit co-optation.

This adaptation of the arcade by queer and marginalized audiences is seemingly unrelated to the intentions of those who performed the initial conversions of film machines, a by-product of their development. At the same time, these new practices are completely dependent on the earlier act of conversion to open a potential space for sexual expression within a public venue.[18] The peep industry was surely cognizant of such practices; indeed, many of its future innovations (including curtains and closing doors, larger booths, concealed passageways) directly and indirectly catered to these uses. Surveillance measures or prohibitions against sexual encounters implemented by arcade owners were presumably motivated by a desire to avoid prosecution rather than a moral condemnation of the clientele. The initial co-optation of the Panoram machine, it would appear, begat a new, unanticipated occupation. Nevertheless, the continued evolution of the format proceeded through a negotiated dialogue between these coexisting entities (management and clientele), remaining all the while responsive to the climate of regulation imposed from the outside.

The notion of strategic inhabitation extends, as well, into the space of filmic production. Here we might speak of a negotiated relationship between the fetishizing tendencies of the peep loop format and the performative expressions of the figures that are filmed. I will limit myself to a consideration of female performances, although more work needs to be produced on the specificities of male peep show performers. Women in peep show loops were explicitly marketed as fetish objects. In the arcades, customers would browse through rows of machines, each adorned with promotional stills hawking their caches of "glorious girls." There exists a tension here between individuality (the individuality of the

18 This type of contingent, secondary occupation might be linked to the biological concept of mutualism—a symbiotic relationship between different species that depend on one another for protection, procreation, or nutrition. In much the same way that ecosystems are comprised of multiple registers of "mutualistic" adaptation, media social spheres are marked by numerous strategic alliances between diverse groups and individuals, even those that might in other contexts be divided by competing interests.

woman, the individuality of the promised intimate exchange), identicalness (the identical machines, the identical format, the overwhelming similarity between the loops being offered), and the repeatability of the experience as a whole (the singular moment of time can be rehearsed ad nauseam). What is subsequently experienced, in a rather concentrated and extreme fashion, is the vacillation between the promise of a singular affective experience and the equivalencies of commodity exchange inherent to capitalist culture in general.

Yet upon viewing the loops, one begins to trace the ways in which the performers work to occupy the space of the text, adapting the format, even in limited capacities, for their own objectives. Low budgets and lack of directorial control leave ample room for the performers to resist fetishization, and assert truly singular subjectivities. In this way, we can find some parallels to the clumsy visualizations of the Soundies musical shorts. Many of the loops resonate with comic dissonance. This effect is surely heightened with historical distance, and may be highlighted for certain audiences (e.g. female academics viewing decades-old loops in museum archives) rather than others (e.g. male arcade patrons viewing contemporary loops in the privacy of a booth). But there is ample evidence that the performers themselves found certain scenarios funny. The actresses often burst into laughter while mugging with props (hula hoops, pillows, Sit-and-Spin-style toys, house plants), especially as the loops drag on for several minutes, and often attempts to gaze seriously into

the camera's lens break down. The loops containing "lesbian" soft-core encounters are especially rife with moments of subversive play, with participants trading knowing glances, giggles and affectionate embraces that appear to exceed the stereotypical framing of the scenario. Even in the more straightforward loops, and especially in those featuring more talented actresses, the personalities of the female figures fill the frame and take control of the space of the loop. Given the improvisational, amateurish nature of these productions, the lack of a narrative structure and the absence (at least in these early loops) of a visible male participant, the "solo girl" peep films are surprisingly rich texts that differ significantly from other pornographic motion picture formats.

Within the peep show experience, there exists a schism between the intentionality of the technology owners (making a profit), the objective of the consumers (getting off) and the motivation of the performers (getting paid). The film texts and the environmental venue each hover in an intermediary position, having to answer to the demands of all three positions. Within this schism, there is a surprising amount of room for irreverent, open play (more so than in most cinematic settings) so long as those intersecting objectives are met.

This is not to construct a falsely utopian view of the alliances that formed the adapted peep show arcades of the late 1960s. These media spaces were deeply problematic, particularly in their exclusion of female patrons, and their probable exploitation of on-screen

performers.[19] Nevertheless, I suggest that we view the parasitic nature of adaptations of the peep show as multifold, diverse and strategic. They are also materially "productive" in the sense that they produce sensations, social spaces of commerce and exchange, and political and legal discourses within their geographical environments. Matteo Pasquinelli makes a similar argument in his work on internet pornography, or "netporn," which he describes as a libidinal parasite:

> What has to be clearly pointed out is that parasites are never "immaterial"—they transform always our fluxes in something really tangible....The libidinal surplus is extracted and channeled across the technological infrastructure and invested into the infrastructure itself, into the imagery or into other devices connected and depending upon that network. [The] accumulation of libidinal surplus turns easily into money, attention, visibility, spectacle, material and immaterial commodities (2007: 11).

It is not always possible to predict what parasitic co-optation will produce. Very often, such co-optations have deleterious effects upon the surrounding atmospheres. Nevertheless, when contending with systems (both biological and cultural) mired in stasis, change and development are only made possible through such an intervention from the outside.

To be sure, pornographic co-optations are limited in their potentials for progressive or political change. Within cultural environments, pornography is a bottom feeder, sustaining itself on social waste, settling into unused corners within the media landscape. Yet we must acknowledge the critical and undertheorized role that pornographic co-optations play in generating technological and economic transformation in the wider media sphere. And it is equally important to remain cognizant of the unforeseen ways in which pornographic adaptations might create spaces for new types of social inhabitation, wherein new possibilities for sexuality and sexual representation are conceived and produced.

Technologies like the Panoram, when discarded and removed from their originary contexts, take on new meanings and possibilities. These possibilities are always dependent upon the architectural environments in which such technologies thrive, and the ways in which the biological inhabitants of these spaces participate in similar cycles of display, exchange and commodification. This is one aspect of filmic adaptation that is rarely considered: the interconnected mutations in content, apparatus and social environment that occur as a result of competing cultural and economic interests. Research on film

19 I presume a male customer here, at least in the era of the bookstore arcades, given the regulations prohibiting female peep show customers in many regions of the country. See Herzog, "In the Flesh," for more on the legal cases related to peep shows (2008: 36–38).

and adaptation might thus benefit from an exploration of the complications engendered by technological and pornographic modes of adaptation. Despite the marginal status of these practices, a theory of pornographic adaptation suggests productive new avenues for exploring the larger cycles of co-optation, scavenging and reappropriation endemic to contemporary commodity culture as a whole.

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