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# The Rationalization and Reenchantment of Cinematic Space 

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The psychoanalytic accounts of cinema that dominate so-called apparatus theory describe spectatorship as a primarily voyeuristic, scopophilic activity. But recent changes in projection technology and theater architecture suggest that the physical and kinesthetic experience of the spectator, immersed in high-fidelity audiovisual technologies, is of paramount importance. This article charts the development of "immersion cinema," critiques existing theories of the cinematic apparatus, and uses a spatial analysis influenced by the work of Henri Lefebvre to suggest that recent developments in cinema may be harmful to its artistic quality and social relevance.

Keywords: apparatus; cinema; immersion; space; technology; architecture

Many film critics and theorists since the 1970s have focused their attention on the cinematic apparatus, an institutional arrangement of interlocking principles, components, and functions that create the pleasures of spectatorship associated with the viewing of a film. The term apparatus refers to both the technological aspects of cinema, such as the camera, projector, image, screen, and theater, and the mental or psychological processes that they activate within spectators (Lebeau, 2001). Canonical works on this topic by theorists such as Jean-Louis Baudry, Christian Metz, and Laura Mulvey rely heavily on psychoanalysis to describe the relationship between these technical and mental aspects of the apparatus and the ways they embed certain ideologies within the cinema (Creed, 2000; Gabbard, 2001; Lebeau, 2001; Mayne, 1993). Many others (see Allen, 1995; Brooks, 1995; Doane, 1986) have both built on and criticized these psychoanalytic
readings of spectatorship. But most film scholars fail to consider the implications of a different, more material factor-the lived and experienced spaces of cinema and the ways that changes in those spaces over time have affected the functions of the apparatus so central to their arguments. Those that do discuss "lived" spectatorship often use ethnographic description of a specific type of moviegoers' (female, Black, homosexual, etc.) reactions to a specific film that deals with or neglects issues central to those groups or communities (Mayne, 1993).

Contemporary cinema employs a host of technological and architectural devices, such as wide screens, large-format projection, digital surround sound, and stadium-style seating, to create a more absorbing and intense sensory experience for viewers. But rather than elicit this absorption or intensity through the somewhat standard artistic processes of screenwriting, acting, and direction, new cinema achieves a more calculable, predictable absorption or immersion of the spectator based not around the vagaries of artistic processes but on the certainties of technological advancements. That the successful production and exhibition of a film increasingly depends on the calculation, design, and construction of spectacular sensory experiences represents a simultaneous reenchantment of theater space and rationalization of cinematic spectacle. New cinema spaces turn moviegoing into a series of technologically induced thrill rides and enveloping simulations. But despite the possibilities for new modes of interaction between viewer and film that these developments open up, "immersion cinema" emphasizes technical achievement to the detriment of social or artistic relevance and embeds a passive, consumerist ideology within the spaces of contemporary moviegoing.

## Immersion Cinema in Historical Context

Like today's megaplexes and IMAX theaters, even the earliest forms of cinema played with the boundaries between real life and their own celluloid projections. One of cinema's earliest predecessors, the magic lantern show of the late 17th through 19th centuries, projected images of the dead in highly managed, theatrical presentations that specifically evoked the supernatural (Gunning, 1995a). From 1904 to 1906, Hale's Tours were a chain of theaters shaped like railroad cars in which viewers watched travelogues recorded from moving vehicles to simulate actual rail travel (Arthur, 1996). And many of cinema's pioneers focused not on its storytelling potential but on the spectacle of its projections themselves. The most realistic films of the time, such as the Lumière brothers' footage of workers leaving a factory, and the most fantastic, like Méliès' effects-laden A Trip to the Moon (1902), were opposite sides of the same "cinema of attractions." This cinema based itself on film's ability to show something, displaying its visibility and calling attention to its own extradiegetic features (Gunning, 1995b).

Today's technologically immersive theaters are also not the first to use grand physical spaces and theater architecture to their advantage-that distinction belongs to the movie palaces that reached the height of their popularity in the 1920s and early 1930s. The context in which films were viewed and the total experience of moviegoing superseded most exhibitors' concerns for the actual film texts. By creating enjoyable spaces around the act of viewing a film, theater owners hoped to guarantee spectators a higher degree of satisfaction while ensuring their continued patronage. This drive to ensure pleasurable moviegoing experiences independent of particular films led to the creation of spectacular movie palaces in the largest downtown markets of major cities and some larger suburbs. These palaces contained elaborate facades, classical statues, lavish foyers, giant
marble staircases, and gigantic chandeliers, with the largest movie palaces holding as many as 6,000 viewers at a time (see Gomery, 1992; Herzog, 1984; Koszarski, 1990; Triponi, 1990).

Yet the current model of immersion cinema described here differs from these earlier forms in some important respects. Movie palaces were gigantic viewing spaces with comparatively small screens that engendered a much less intense and absorbing kind of spectatorship. If anything, movie palaces directed the viewer's attention away from the screen and toward the accoutrements of the theater-one was almost more likely to be absorbed in contemplation of one's opulent surroundings than in the movie itself (Kracauer, 1987). Today's immersive theaters take that metaphorical absorption and attempt, through new architectures and technologies, to literally absorb the viewer within the film through the use of powerful surround-sound-scapes and giant curved screens that encompass most of the viewer's peripheral vision. Similarly, magic lantern shows and Hale's tours could not match the visceral intensity or the ability to envelop the viewer that comes with contemporary developments in movie theater design and construction.

Enveloping viewing conditions can be traced back to the 1950s, with the introduction of Cinerama and Cinemascope. These were the first types of film exhibition to feature curved, wide screens and sound systems that broadcast different sound effects from different speaker locations in the theater depending on the position of actions taking place on screen:

> The clearly delineated segregation of spaces which had characterized previous conditions of motion picture spectatorship gave way to an illusory integration of spaces in which images and sounds from the "fictional" space of the motion picture appeared to enter the "actual" space of the audience; the audience, thus surrounded by images and sounds, felt itself to be part of the space depicted on the screen. (Belton, 1992, p. 154)

But these new technologies of exhibition were only adopted in the largest of first-run theaters for a number of years after their introduction to the general public. Whereas wide screens slowly enjoyed popularity outside first-run theaters, magnetic stereo sound failed to catch on (Belton, 1992). Cinerama and Cinemascope were marketed to exhibitors as technical processes to combat the competition of television, but the auditory advantages of surround sound, unlike the visual advantages of the wide screen, were at first largely seen as obtrusive. "Rather than creating a more perfect illusion of depth on the screen, [surround-sound systems] necessarily called attention to the arbitrariness of their choice of sources" (Belton, 1992, p. 165). Somehow these technological developments of screen and sound became simultaneously identified with both realism and spectacle."The attention of the audience was drawn to the novelty of the apparatus itself. The 'greater realism' produced by the new technology was understood, it would seem, as a kind of excess, which was in turn packaged as spectacle" (Belton, 1992, p. 160).

Regardless of its perception among audiences and exhibitors, it is clear that the wide-screen revolution of the 1950s offered new cinematic effects and a novel use of theater space to moviegoers. As Ritzer (2005) noted, the creation of spectacle is a tool often employed by modern consumption locales to overcome their rationalized, disenchanting aspects. While still part of a highly rational system, these new developments offered reenchanting elements to combat the small screens and mediocre sound that had become the norm in cinematic exhibition of the postpalace era. For neighborhood theaters and even the grandiose movie palaces, the use of screen space had been an afterthought (Paul, 1996). This lack of attention to image size and quality detracted from the enchantments of cinema spectatorship. Wide-screen cinema
reenchanted film viewing by blurring the boundaries between theater space and screen space and in the process, created a new, more absorbing moviegoing spectacle.

Other attempts to blur the line between screen space and theater space were less successful. In 1959, AromaRama and Smell-O-Vision were introduced into select theaters. These systems piped odors into theaters at specific moments of a film, but neither provided for the rapid evaporation of odors, and by the end of a "smelly", the theater smelled like a garbage dump (Gomery, 1992). Similarly, 3-D movies, though they had been around since the 1920s, became briefly popular in the early 1950s, riding on the heels of the emergence of Cinerama and other wide-screen systems. But the process required huge monetary and technological investments (new metallic screens and two extra projectors, not to mention a continuous supply of cardboard 3-D glasses), and the added revenues of three-dimensional film never proved worth the investment. Despite brief efforts to revive 3-D in the 1970s and 1980s, similar problems prevented its widespread popularity (Gomery, 1992).

The multiplex was born in the early 1960s, with two-, four-, and six-screen complexes appearing in 1963, 1966, and 1969, respectively. These multiscreen cinema complexes were commonly connected to malls and shopping centers in suburban locales. They eliminated many of the costs associated with older forms of exhibition by concentrating a number of screens in one area and making their operations highly rational. But while offering a convenient location and a somewhat wider choice of films to the suburban population, the multiplex brought with it a reduction in the quantity and quality of services, a lack of architectural ambience, uncomfortable seating arrangements, awkward sightlines, and skewed image projection (Gomery, 1992). Multiplexes offered the large theater chains "the cost-effectiveness of uniformity. They [were] made up of a common and infinitely repeatable design, somewhat modular in approach, so that the number of screens actually contained within the multiplex [wouldn't] change the overall look of the theater" (Paul, 2002, p. 288). With the growth of suburbs in America in the 1960s, 1970s, and 1980s, the multiplex became the dominant model of American cinema and stayed that way until the mid to late 1990s.

As the shopping center world expanded to take over retailing in the United States, it became possible to operate a half dozen indoor theatres of a few hundred seats each with one concession with two high school students, one projectionist, and one manager who doubled as ticket taker. Like the fast food operations across the nation, labor in movie theaters had been reduced to low-cost, untrained servers and button pushers (Gomery, 1992).

This "McDonaldization" (Ritzer, 2004) of movie theaters had negative consequences on the moviegoing experience. The rise of the formally rational multiplex mitigated the wide-screen revolution. As late as 1990, complaints about the "bedsheet-size screen and tinny speakers of the average cineplex" remained common (Stauth, 1990, p. 16). Even the addition of high-fidelity Dolby sound systems in the multiplexes during the late 1970s and early 1980s hurt the viewing experience as much as it helped, thanks to the cost-cutting measures that encouraged inadequately padded walls between auditoriums. "Thus, as one tried to catch a quiet moment of Annie Hall (1978), more often than not the rousing battle sounds of Star Wars (1977) poured through the wall, drowning out lines and distracting attention" (Gomery, 1992, p. 100).

Originally the multiplex was designed with the expressed purpose of offering a wider variety of films to consumers. But the huge number of screens created by the multiplex phenomenon meant that films could open on as many as 2,700 screens at once. Such large openings necessitated massive investments of studios in film prints
and advertising. As a result, there was more pressure to load films with insurance: "superstars, super cars and a story a three year old could explain to his little sister" (Stauth, 1990, p. 16). In the multiplex era, movies had to be marketable above all else.

In the past, the slow release of a film through a system of tiers depended primarily on local advertising and ... word-of-mouth. Now, in effect, the word-of-mouth must exist before any moviegoer has seen the film. . . . If a movie opens wide . . . there must already be widespread interest in it. (Paul, 2002, p. 289)

However, even as early as 1979 the Cineplex Odeon chain began creating 18-auditorium theaters with such amenities as rotating art exhibits, cafes, and babysitting services. This was a response to the "cookie-cutter" model of multiplex building that had created thoroughly disenchanted cinema spaces. By 1990, film critic Cameron Stauth could remark that, "The latest trend in theater construction and refurbishment is to increase screen size and to improve the quality of projection sound" (p. 16). This trend away from the deficiencies of the multiplex led to new uses of both exterior and interior theater space and new technologies of film projection that are further altering the nature of cinematic spectacle and further reenchanting cinema space.

## The Ascendance of Immersion Cinema

In 1994, AMC Entertainment built the world's first megaplex near Dallas, Texas, "a twenty four-auditorium, stadium-seat behemoth" (Banham, 2001, p. 2). This megaplex differed from its predecessors by an increased number of screens, a renewed emphasis on services and fantastic architecture, and a new organization of technology and space within each theater-all in the effort to reenchant the drab, unfriendly multiplexes that had characterized theater design in previous decades. The development of the first megaplex ignited a frenzy of megaplex construction in the United States. The number of movie screens rose from 25,830 in 1994 to a peak of 36,448 in 1999 (National Association of Theater Owners, n.d.). This new model became the industry standard while older multiplexes and even smaller one- and two-screen theaters were largely phased out.

The recent introduction of stadium-style seating-which provides views of the screen less impeded by the heads of those in front of the spectator-and a general increase in screen size, projection quality, and audio fidelity at the new megaplex theaters have led to a fuller realization of the absorbing experience attempted by the earliest wide-screen experiments. When these developments are considered in conjunction with the growing importance of IMAX and other large-format exhibition techniques, the emergence of a new ideal of physical and technological immersion in cinema becomes clear.

Large-format cinema, a term used to describe movies shot with 70 mm film projected onto giant screens (often 8 stories tall) in theaters with stadium-style seating, has grown quickly since its inception. Pioneered by the IMAX company in the 1960s, the large-format process was initially used in theaters at museums or other educational sites to display nature documentaries. Today IMAX offers a variety of options, from three-dimensional, stereoscopic projection to a process that transforms standard 35 mm Hollywood prints into 70mm IMAX films (Lowry, 2002). Mainstream Hollywood movies are being played with more frequency on IMAX screens, and IMAX theaters are being built outside museums in megaplexes and amusement parks. Although large-format theaters are nowhere
near as prevalent as megaplexes, both share an approach to film exhibition that alters the nature of cinematic spectatorship.

Large-format theaters produce an "immersion cinema" in which the spectator experiences a participation in or interaction with the filmed spectacle through a series of technologically driven simulations on screen and in the theater. The utilization of firstperson, "you-are-there" perspectives is one of the key aspects of these immersive spectacles. But this visual technique is dependent on spaces and technologies that enhance the absorbing nature of that camera perspective. With larger and larger screens, 3-D IMAX projection, stadium-style seating, and digital surround sound, first-person perspective is amplified to a new level of simulated audience participation. "We become morphed into the illusion through the numerous technologies that bombard our senses" (Ndalianis, 2000, p. 264). As Bill Breukelman, former chairman of IMAX, said of this new, immersive medium, "When you see our movie about mountain gorillas you are not a human being watching a gorilla. You are a gorilla" (Wollen, 1993, p. 10). This experience differs from the voyeuristic identification with the camera that has been the center of apparatus theory, for this camera gaze does not attempt to hide. Instead, the technologically enhanced camera perspective announces itself by swooping around objects and characters on screen and simulating extreme experiences for audiences.

Many of these IMAX-inspired aesthetics have been used in today's biggest blockbusters:

Every IMAX movie has a money shot in which the camera tilts over a precipice or hurls something into the viewer's face, and Titanic is rich in similar sensations-the graceful sweeping arc that takes in the entire ship from stem to stern; the exhilarating scene . . . balancing above the ship's prow; the vertiginous multiplane shot of the crippled liner's full length jutting from the water. On the 60 -foot screen at the Hollywood 27, with every creak of the sinking ship amplified in digital clarity, Titanic is a stunning experience. (Ridley, 1998)

As this passage makes clear, the grand scale of exhibition at today's megaplexes allows for the kinds of sensations and pleasures often associated only with IMAX. These similarities suggest a convergence of aesthetics and a blurring of boundaries between megaplexes and IMAX projection, both of which are now focused on the creation of immersive environments and intense sensory experiences.

New cinematic experiences like this rely on a tension between the realistic qualities of filmic illusions and their existence as technological achievements. They both expose and disguise their technological nature and "reflexively engage the audience in their process of construction" (Ndalianis, 2000, p. 259). Like the older cinema of attractions associated with special effects pioneers such as George Méliès, immersive cinema spectacles "focus attention back on the artifice of their worlds, evoking in us states of delight that lure us into the attraction through their performance" (Ndalianis, 2000, p. 258). For both types of cinema, spectatorship is somewhat ambiguous, as viewers "are invited both to be immersed in . . . the illusion (the magic) as a reality, and in the methods used to construct that illusion that ruptures its reality" (Ndalianis, 2000, p. 262).

Although previous art critics and historians have described art reception as immersive or absorbing (e.g., Benjamin, 1968), this notion was used metaphorically, to describe the degree to which one was emotionally or intellectually involved with a work of art. Today, this metaphor, and the ideal it represents, is replaced with an actual technological immersion in the lived space of the theater. It would seem that rather than elicit this metaphysical absorption through the standard artistic devices of narrative, characterization, or moral, new cinema achieves a more calculable, predictable absorption of the
spectator based not around the vagaries of artistic processes but on the certainties of technological advancements. With powerful bass notes and explosions providing a visceral rumbling; giant, curved screens enveloping one's peripheral vision; and increasingly, 3-D images literally jumping off of those screens, contemporary film exhibition represents a bodily discipline, a technological interface between narrative and reality that blurs many distinctions between lived bodies and screen space.

The comments of many movie industry figures support the idea that contemporary cinema technologies are increasingly focused on physical experience. Both Douglas Trumbull, a former IMAX executive and the special effects pioneer behind films like 2001: A Space Odyssey (1968) and motion simulator rides such as Back to the Future: The Ride (1991), and Barry Clark, large-format screenwriter of such films as Galapagos: The Enchanted Voyage (1999), have described the increasing importance of cinema's effects on the body. For Clark (2001), these effects, or "jolts," come at "moments when the audience is taken by surprise and thrown into their seats." Clark described IMAX cinema as "a barrage of visual and aural information bombarding the audience." Trumbull described his own efforts at creating motion simulator rides that involve typical cinematic elements like dialogue and character development, "But it's not somebody else who's getting shot at or catapulted out of a rocket. It's you. This is what I'm most interested in: the direct first person experience" (Abrams, 1995, p. 17). Furthermore, James Cameron, director of immersive cinema spectacles like Titanic (1997) and Ghosts of the Abyss (2003), has acknowledged that 3-D IMAX films "always tend to be pushing some object into your face" (Bradshaw, 2003, p. 76). But the propensity for extreme sensations that these men refer to may be problematic for some viewers. With leading members of the industry discussing jolts, barrages, getting shot at, having things pushed into one's face, and being thrown into one's seat, immersion cinema's intense effects have the potential to overshadow some of film's more subtle pleasures.

The new mode of experiencing cinema has had profound effects on film texts themselves. As immersive cinema technologies have become increasingly prominent in cutting-edge amusement parks, IMAX theaters, megaplexes, and other consumption settings, they have not only altered the nature of cinematic spectacle but have helped foster a shift in the very content of popular film. The top 10 grossing American films of 2003 were Finding Nemo, Pirates of the Caribbean: The Curse of the Black Pearl, The Lord of the Rings: Return of the King, The Matrix Reloaded, Bruce Almighty, X2: X-Men United, Elf, Chicago, Terminator 3: Rise of the Machines, and The Matrix Revolutions (Top 250 films of all time: 2003, 2003). Of these, only Bruce Almighty, Elf, and Chicago do not rely heavily on special effects or action sequences. Most of these movies create fantastic digital geographies that are explored by the audience seated in the theater as much as by the characters on screen. In contrast, of the top grossing films 20 years earlier in 1983, only Star Wars: Return of the Jedi is in the same class as the effects-laden digitally enhanced blockbusters two decades later. The rest of 1983 's top 10 includes one movie with traditional action stunts-Octopussy-one movie with some special effects-War Games-and seven movies that seem comparatively effects free (Tootsie, Flashdance, Trading Places, Mr. Mom, Staying Alive, Risky Business, and National Lampoon's Vacation) (Top 250 films of all time: 1983, 1983).

In sum, immersion cinema represents a new set of technological and aesthetic criteria in which sensory experience and the physical immersion of the spectator within the medium are of paramount importance. These criteria are at the heart of new movie theater designs, new production and exhibition technologies, and the new films that are created and exhibited there. This emergent type of cinema continues to raise questions as to whether older forms of understanding cinema, and ourselves in relation to it, are obsolete.

## Theories of Apparatus and Spectatorship

The earliest descriptions of the cinematic apparatus were influenced by Louis Althusser's (1971) "Ideology and Ideological State Apparatuses." Althusser added to the Marxist canon a more nuanced description of the role of ideology in reproducing dominant relations of power. He saw ideology as necessarily embedded in particular apparatuses and material practices responsible for transforming people into subjects of the state; these included the family, the education system, the political system, and religion as well as communications and cultural systems such as the press, radio, television, literature, and the arts (Althusser, 1971). Film theorists soon borrowed Althusser's conception of the apparatus to understand the ways that cinema reflected and reinforced dominant ideologies (Kaplan, 1990). Those theorists turned their attention to the "deep structures" at work within the medium (Gabbard, 2001, p. 9), describing cinema's effects on the spectator in terms taken from Freudian and Lacanian psychoanalysis. Thus, many important theories of the cinema have detailed the means by which the various technical and mental processes associated with film spectatorship-the apparatus-have served in some respect to reproduce and indoctrinate a docile, compliant audience.

The immobility of the spectator is a foundational principle of apparatus theory. Jean-Louis Baudry (1986) began his seminal essay, "The Apparatus: Metapsychological Approaches to the Impression of Reality in Cinema" (1986), by relating the experience of moviegoing to Plato's metaphor of the cave. For Baudry, the cave metaphor had an obvious analog in the cinema and also in Freudian conceptions of the dream-state and the womb. Cinema, like the cave, creates an impression of reality that fascinates its spectators and compels them to remain immobile-in cinema's case, seated (Baudry, 1986). Christian Metz (1982) described cinema as analogous to Lacan's mirror-stage. According to Lacan, recognition of one's image in a mirror occurs at a point in development when a child's physical ambition outstrips its motor skills. Because of this, when a child recognizes its reflected self, it misidentifies that self as more complete, as superior or perfect. This mirror-effect "alienates man in his own reflection and makes him double of his double," subject to a "pure effect of lack and endless pursuit, the initial core of the unconscious" (Metz, 1982, p. 4). That this lack is reflected and reenacted on screen contributes to the spectator's commitment to and fetishization of cinema (Creed, 2000).

Both Metz's and Baudry's accounts of the cinema rely on the spectator's inability to test cinema's images and sounds-his distance from the screen, his silence, and his immobility-to explain the perceptual illusion characteristic of narrative cinema. Reality must be felt or tested out to tell the difference between what we perceive and what we imagine. Because the spectator cannot perform these tests while viewing a film, he reverts to a more childlike state-simultaneously accepting that what he sees is real and abandoning secondary processes such as attention, judgment, and reasoning for a more primal set of urges and desires (Lebeau, 2001).

According to the apparatus theorists, classical narrative cinema's power to promote the dominant social system and ideology comes from its ability to induce this regressive state of spectatorship (Lebeau, 2001). But cinema spectatorship is much more varied than these theorists acknowledge, and any individual spectator of any given film is likely to contend with external environmental factors-uncomfortable seats, trips to the restroom by himself or his neighbors, and distractions from other parts of the theater (see Altman, 1992). Many of the supposedly immobile spectators wrapped up in cinema's dreamlike illusions and unable to perform reality tests are in actuality usually eating popcorn and drinking soda as they view a film. This context challenges the notion of cinema as a dreamlike state.

The visceral effects of powerful new audio technologies that can literally shake one's seat also call into question the spectator's lack of a reality test. Unlike light, which is only sensed by the eyes, the entire body feels sound vibrations. The body responds to sound on a physiological level-sound has been shown to affect blood circulation, skin resistance, muscle tension, and breathing (Stevens, 2002; see White, 1975). The intensity with which new cinema technologies stimulate the senses and the physical presence of high-fidelity digital surround-sound effects suggest that cinema's apparatus is no longer avoiding the reality tests of its spectators.

Another foundational principle of canonical apparatus theory is the central presence given to scopophilia and voyeurism. For Metz (1982), cinema is similar to the mirror in that we are in a submotor and hyperperceptive state when we view films but different in that the cinematic mirror reflects all but ourselves. Because the spectator's image is absent from the screen, he comes to identify primarily with the all-perceiving look of the camera (Metz, 1982). This identification is part of "the scopic drive," the desire to see, that is one of Lacan's four types of sexual drives. Cinema's "perceiving drive," a combination of the desire to see and the desire to hear, is based on the absence of its object, the distance of the look, and the distance of listening (Metz, 1982).

This distance of looking and listening in cinema is inherently voyeuristic (Metz, 1982). It is also part of the process by which cinema objectifies the images of women. Laura Mulvey's (1989) essay "Visual Pleasure and Narrative Cinema" asserted that the unconscious of patriarchal society, reflected and represented by the concepts of Freudian psychoanalysis, has structured film form so that the look of the camera is a male look (Mulvey, 1989). This male gaze enables the viewer to live out fantasies and obsessions through the imposition of those fantasies and obsessions on the silent, passive image of the female other who is always the bearer, not maker, of meaning. The conditions in which film is viewed-the anonymity of a darkened theater-and the narrative conventions of mainstream Hollywood cinema-a camera that is not addressed or recognized by its female objects-give the illusion of a voyeuristic separation of spectator and screen (Mulvey, 1989).

But contemporary cinema architecture uses taller, wider screens and stadium-style seating, in effect placing spectators closer to the screen. Techniques such as 3-D projection, popular in IMAX theaters, shock the spectator by acknowledging his presence and by engaging him in the real space of the theater. Both IMAX documentaries and bigbudget blockbusters such as Titanic feature camera perspectives that swoop, glide, dash, and dart through the diegetic action. Joined with powerful digital surround sound, these developments suggest that the distance of looking and listening, so critical to cinema's voyeuristic pleasures, has been greatly reduced. Viewers are no longer simply voyeurs; they are participants in an immersive sensory environment.

## Immersion Cinema and the Cyborg Body

The technologically immersive ideal represented by wide screens, digital surround sound, 3-D IMAX projection, and a host of other contemporary developments in cinema exhibition necessitates an increased emphasis on the physical experience of cinema within film theory and a reclamation of the lived body by theorists of the cinematic apparatus. Although the voyeuristic model of spectatorship envisions a hidden viewer gazing from afar, largely unacknowledged by the sights and sounds of the film, the realities of contemporary exhibition practices suggest otherwise.

Sucked in by giant screens and first-person camera perspectives and enveloped by powerful surround-sound effects, today's spectator engages cinema on a physical level. This ideal of physical interaction is a leading motivation behind many new technological developments just beginning to be adopted in theaters. For example, Famous Players cinema chain has introduced "GSS Sensory Seats," a system that broadcasts low frequencies in a movie's soundtrack from devices implanted in seat backs to enable spectators to physically feel sound vibrations during a film's more intense scenes (Vlessing, 2002). New 3-D headsets at select IMAX theaters contain not only liquid crystal lenses but a pair of sound transducers to further envelop the spectator in the experience (Evans, 1996). Although first-person perspectives are not new to cinema, these kinds of technological advances help propel the viewer into the filmic action in ways that simple camera techniques on their own could not.

Techno-scientific constructs such as immersion cinema alter modern distinctions between science and technology, nature and society, and subjects and objects and can transform us into a new breed of "other" (Haraway, 1997). That "other" is the cyborg, a being "simultaneously animal and machine, who populate(s) worlds ambiguously natural and crafted" (Haraway, 1991, p. 149). The cyborg is Haraway's metaphor for contemporary implosions of the natural and artificial that occur around the human body with increasing frequency due to new biological and computerized technologies (Haraway, 1997). Boundary breakdowns between human and animal, organism and machine, and physical and nonphysical space make an analysis of the cyborg possible (Haraway, 1991), and within contemporary cinema the second and third breakdowns are certainly apparent. The boundaries between the metaphysical space of filmic images and the physical space of the theater collapse with giant 3-D IMAX projection, and the lines between man and machine are blurred with wide, curved screens; digital surround sound; and sta-dium-style seating. The spectator becomes one with the spectacle through these technological interfaces; one no longer goes to the theater and simply watches a movie, one is plugged into it, experiencing it as much viscerally as visually.

The concept of the cyborg implies a certain interactivity between technology and humanity. However, cinema's new fusions of man and machine are better understood as exhibiting "passive interactivity." Although the immersive cinema spectacle is certainly constructed around the viewer as never before, that viewer still has little or no control over the course of the spectacle. As filmmaker Peter Henton put it, "All you have to do is sit back and scream" (Dudsic, 1999, p. B 11). Although the overwhelming nature and number of new exhibition technologies deployed around the spectator makes him feel that he is a part of and interacting with the film, his only real choice is to sit back and enjoy, to plug in, and hang on tight. The pluralistic possibilities inherent in the cyborg find less room for expression within this system of rationalized, technologically induced thrills.

A truly interactive communication experience, unlike the passive-interactive experience embodied by immersion cinema, would more closely resemble the traditions of oral literature. In things like bedtime stories and campfire tales, audiences have considerable agency over the telling of the story. These audiences serve as cocreators of the stories in which they are engaged by throwing out suggestions and reacting to what is told. Storytellers are able to adapt accordingly, adding new elements to old tales (Ong, 2002). Oral literature is the product of layer upon layer of these retellings accruing over time and adapting to surroundings (Benjamin, 1968). Today's "total information environments" or "cyborganizations" lack the human proportion and intimacy of truly interactive storytelling. As Kingsely Widmer prophetically noted in 1973, "If not subject to
the converging limitations of audience control, sensitively humane scale, and effective criticism . . . communications will tend to impose their own processes and powers, violating the human sensibility historically oriented in previous communications" (p. 408).

Of course, film spectatorship has always been a passive affair. But contemporary cinema engenders this passivity in new ways-through the illusions of interactivity and immersion-and with new technologies that might otherwise be deployed to create a more human mode of cinematic interface. The metaphor of the cyborg is one in which agents may take control of the social construction and semiotic signification of their bodies and sexes (Haraway, 1991), but immersion cinema prevents this kind of audience agency. Its overemphasis on physical experience creates passive consumers who pay to plug in to visceral thrills without, necessarily, any meaningful interaction with the film. Having determined that intense technologies of exhibition produce a more reliably entertaining experience for spectators than the human talent behind them-and having focused their energies accordingly-Hollywood producers are increasingly steering cinema away from human intimacy and away from the empowerment that might accompany a more fully interactive experience.

## A Spatial Approach to Immersion Cinema

Using a spatial analysis of cinema to address the concerns of apparatus theory allows us to understand cinema as an ideological tool without resorting to the kinds of psychoanalytic language that rest on such problematic assumptions about theater space and the lived body within the theater. Cinema need not resemble a dream, a cave, or the womb to be taken seriously as a means of conveying the ideals of a capitalist, patriarchal culture. Instead, ideology can be seen as embedded in the very spatial practices through which we consume the moviegoing experience. A spatially sensitive approach to film theory is therefore most suited to examine this process of cinema consumption, and such an approach is suggested in the work of Henri Lefebvre.

Lefebvre's (1995) The Production of Space outlined a broad theory of space with farreaching implications. Like Louis Althusser, Lefebvre is concerned with the ways in which ideology is reproduced. However, Lefebvre looks beyond broad Althusserian apparatuses such as school, family, and labor and focuses instead on their actual spatial loci. For Lefebvre, ideology is a discourse on social space, and ideologies create spaces that guarantee their continued existence. He conceptualizes space as three dialectically related physical, mental, and social spaces (Lefebvre, 1995). Physical space, or "spatial practice," refers to both the built and natural environments. Mental space, or "representations of space," describes the designed, planned, partitioned, and measured aspects of space-"the space of scientists, planners, urbanists, technocratic subdividers, and social engineers" (Lefebvre, 1995, p. 38). Social space, or "representational space," entails "space as it is directly lived through its associated images and symbols" (Lefebvre, 1995, p. 39), the space of users, inhabitants, and artists.

Echoing the Weberian concern over the "iron cage of rationality," Lefebvre worries that abstract space-the space of technology, applied sciences, and knowledge linked to power-has overpowered the spaces of lived experience. Abstract space is formal and quantitative; it erases distinctions that derive from nature and the body and replaces them with formal relationships. Inasmuch as it aligns with capitalism, abstract space seeks to mold the spaces it dominates often by violently confronting any obstacles or resistance (Lefebvre, 1995). Abstract space also generates a kind of false consciousness,
cloaking conflicts and differences while creating an illusion of neutrality (Lefebvre, 1995). The procession of abstract space in modernity extends into the spaces in which we live, work, reside, and seek leisure.

Lefebvre does, in traditional Marxist fashion, hold out hope that abstract, mental space carries with it the seeds of its own undoing. For Lefebvre, this undoing will come in the form of a new "differential space," one that accentuates difference even as it unifies spatial practices (Lefebvre, 1995). Edward Soja (1996) called this thirdspace and described it as a creative synthesis and extension that builds on perceptions of the "real" material world as well as "imagined" interpretations and representations of that reality. (Soja, 1996, p. 6). Thirdspace allows for an openness, flexibility, and multiplicity that mental and physical space alone forestall. Immersion cinema has the potential to be such a space. "The key step is to recognize and occupy new and alternative geogra-phies-'a thirdspace' of political choice-different but not detached entirely from the original binary oppositions" (Soja \& Hooper, 2002, p. 387). Only through this reclamation of lived, social space can one hope to escape a consumer capitalist ideology and the limitations it imposes on contemporary cinema.

Using Lefebvre's perspective to analyze immersion cinema allows us to see the ways in which the spaces of theater and screen are imbued with particular ideologies. This article suggests that immersion cinema fails to live up to its potential as a tool for creating the kind of thirdspace lauded by Lefbvre and Soja. On one hand, new cinema exalts physical sensation and experience above all else. Its exhibition technologies envelop spectators with a barrage of hyperrealistic effects in the name of greater realism, without a moment's pause for the implications or contradictions therein. On the other hand, cinema's new physicality is the result of an increasing reliance on powerful new technologies and the technicians who control them. This emphasis on abstract technologies and their deployment in physical space detracts from the lived, social spaces of imagination and artistic expression in which social actors come to fully understand themselves and their lives.

An examination of Steven Spielberg's Saving Private Ryan (1998) can further highlight the spatial illusions built into immersion cinema and the cultural dangers that accompany them. In much the same way that Schindler's List (1993) is now required viewing for students wishing to learn about the Holocaust, Saving Private Ryan has been treated as something greater than a simple movie. "It bombards the audience with savage hyperrealistic effects. This, the movie insists, is as close to being there as you will ever get" (Sweet, 1998, p. 4). But its claims to veracity are built primarily on its ability to produce intense physical experiences for theatergoers, particularly during the first 30 minutes of the film, in which the Battle of Normandy is reenacted through a relentless barrage of mortar explosions rocking one's seat and bullets whizzing toward the camera on screen and through the acoustic space of the theater. These intense physical experiences are not, of course, products of real or authentic experience but instead the result of meticulous technical processes calculated to provide the most absorbing experience possible.

The danger here is that the cinema's new ability to inflict acute, enveloping sensory experiences on the spectator is now equated with a sense of historical accuracy. This development is ideologically laden, encouraging its own kind of false consciousness. Powerful, immersive cinema experiences such as Saving Private Ryan might easily serve as a new kind of military recruitment tool. After all, having lived through such a physically absorbing simulation may encourage the perception among spectators that war is something intense yet manageable, something to be experienced rather than feared.

Whereas war movies have often encouraged patriotism and nationalism through their stories of heroism and sacrifice, this new, physically enveloping approach to film turns even the most harrowing tales of war's dangers into spine-tingling experiences, making brutal aspects of history fun in the same way that a particularly scary or intense roller coaster ride is fun. Francois Truffaut once remarked that it was impossible to make an antiwar war movie because war looked so good on film. Although this may be overstating the case-as movies like All Quiet on the Western Front (1930), Paths of Glory (1957), and Platoon (1986) attest to-contemporary trends in exhibition may be moving cinema in that direction. The actual space of the immersive theater, geared as it is toward technologically induced sensations, helps turn a film like Saving Private Ryan into a set of physical thrills to be experienced and enjoyed as much as a story to be digested and debated. What's more, its perceived authenticity depends on the extent of its technologically achieved intensity-a clear example of abstract space overtaking lived space.

This spatial imbalance is the result of a new rationalization of cinematic spectacle. Just as the advent of recorded sound in motion pictures was used to standardize soundtracks from theater to theater and reduce the theaters' dependence on real, live musicians (Kraft, 1994), new technologies and architectures of exhibition standardize the delivery of spectacle and reduce the studios' dependence on nuanced writing, directing, and acting. Whether or not a given film will be both intellectually engaging and relevant to the daily lives of audience members is much less predictable than the ability of a thrill ride to elicit oohs and aahs from its audience. By shifting the focus of cinema to intense experiences that are primarily achieved technologically, the film industry has increased its ability to consistently provide a satisfying experience to spectators. This reliance on technologies and their deployment in physical space provides a more efficient and calculable spectacle, but it also leads to an increasingly fleeting, ephemeral experience less concerned with stimulating the intellect or encouraging debate.

Immersion cinema's dominant physicality restricts the nature of cinematic experience and deters the meaningful contemplation of film's aesthetic and political implications in lived space. If media is pedagogy (see Giroux, 2002), immersive film exhibition teaches us the importance of physical thrills and chides us to forget about the meanings and motives behind specific film texts. Whereas critics may still debate a film's textual meaning or significance, that debate is rendered impotent or irrelevant by this changed context of moviegoing. Immersive cinema spectacles do effectively grab our attention, but their immediacy and sensationalism tend to divert that attention away from contemplation or discussion. Today's intense technologies of exhibition can efficiently and predictably ensure a pleasurable moviegoing experience for audiences regardless of, and often in spite of, the film's textual qualities.

In sum, contemporary immersion cinema is dominated by both mental and physical spaces, to the detriment of lived, social space. The abstract, conceived space that is the new immersive theater, coupled with the overwhelming sensations of its intense spatial practices, drowns out much of its potential for human intimacy and meaningful interactivity. Although we plug into these cinematic spectacles through new designs and interfaces, our interactions with these technologies still follow a rigid script, one in which we have little agency over the social construction and semiotic signification of our own bodies and experiences. The kind of differential or thirdspace possible with the advent of these new exhibition technologies has yet to be realized within contemporary cinema. So far, immersion cinema has served mainly to rationalize the production of cinematic spectacle and stoke a public taste for intense sensory experience. The relationship between physical thrills and technological processes in new cinema that this article has
mapped out seems to leave little room for the kind of spaces in which art is made relevant to daily life.

If immersion cinema is to attain the kind of thirdspace positioning suggested by the present work, it must deploy technology in a way that does more than simply absorb spectators as a single mass. The passive-interactive nature of current exhibition practices suggests that future developments could result in a more truly interactive experience tailored to individual responses and reactions. Studies have associated this kind of interactive media experience with higher cognitive capacity (Vorderer, Knobloch, \& Schramm, 2001). Hopefully this interactivity will allow for the kind of celebration of art, difference, and clandestine imaginings advocated by Lefebvre. Besides increasing the level of interactivity, a more meaningful immersion cinema must find ways of using technology to emphasize the human aspect of its texts and settings. Improvements in recording and projection fidelity do not necessarily lead to the ascendance of hyperreal simulations and empty thrills; that is simply the result of the specific spatial practices and representations of space currently at work.

Of course, the task of fully understanding immersion cinema and effectively advocating for its transformation into a kind of thirdspace requires further study. Surveys of audience members at immersive cinema events and investigations of more truly interactive media technologies would be a good start. As it stands, with physical space, sensory experience, and technical knowledge overpowering the social spaces of everyday life, immersion cinema remains a dominated space in which consumption of intense and fleeting experience is increasingly the norm.

## Conclusion

The present work has incorporated a spatial perspective into the discourse on film spectatorship and the cinematic apparatus to better describe and analyze contemporary cinema. Such an approach overcomes some of the deficiencies of existing work in this field, deficiencies that have become particularly striking in light of the changes to film exhibition in recent years. Using Henri Lefebvre's tripartite model of space allows for the articulation of a new perspective on this new cinema. Immersion cinema-inasmuch as it exalts technologically induced physical thrills at the price of socially significant themes and settings-is unbalanced. Its overemphasis on physical and mental space creates an increasingly rationalized event or happening to be uncritically experienced or consumed, with little relevance to lived, social spaces. Hopefully, shifting the discourse on spectatorship and the apparatus away from psychoanalytic themes and toward an approach more grounded in spatial and bodily experience will allow that discourse to remain relevant while also encouraging further analysis of and possible corrections to the imbalances of immersion cinema.

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