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Games, the New Lively Art

> Another important element is a belief that creators are artists. At the same time, however, it's necessary for us creators to be engineers, because of the skill required for the creations.[1]
>
> —Shigeru Miyamoto, Nintendo

> Why can't these game wizards be satisfied with their ingenuity, their $7 billion (and rising) in sales, their capture of a huge chunk of youth around the world? Why must they claim that what they are doing is "art"? . . . Games can be fun and rewarding in many ways, but they can't transmit the emotional complexity that is the root of art.[2]
>
> —Jack Kroll, *Newsweek*

> Let's imagine games as an art form. I know, I know—for many of us in contact with the so-called real arts, the notion sounds pretentious. It also makes developers who are former computer science majors edgy because it challenges assumptions that games are founded upon technology. Still, it's a useful concept. It's especially useful when we start to think about the mediocre state of our profession and about ways to elevate our aims, aspirations, and attitudes.[3]
>
> —Hal Barwood, LucasArts

Over the past three decades, computer and video games have progressed from the primitive two-paddles-and-a-ball *Pong* to the sophistication of *Final Fantasy*, a participatory story with cinema-quality graphics that unfolds over nearly 100 hours of game play, or *Black & White*, an ambitious moral tale where the player's god-like choices between good and evil leave tangible marks on the landscape.[4] The computer game has been a killer app for the home PC, increasing consumer demand for vivid graphics, rapid processing, greater memory, and better

sound. One could make the case that games have been to the PC what NASA was to the mainframe—the thing that pushes forward innovation and experimentation. The release of the Sony PlayStation 2, the Microsoft Xbox, and the Nintendo GameCube signals a dramatic increase in the resources available to game designers.

In anticipation of these new technological breakthroughs, people within and beyond the games industry began to focus on the creative potentials of this emerging medium. Mapping the aesthetics of game design, they argued, would not only enable them to consolidate decades of experimentation and innovation but would also propel them toward greater artistic accomplishment. Game designers were being urged to think of themselves not simply as technicians producing corporate commodities but rather as artists mapping the dimensions and potentials of an emerging medium; this reorientation, it was hoped, would force them to ask harder questions in their design meetings and to aspire toward more depth and substance in the product they shipped. At the same time, the games industry confronted increased public and government scrutiny. If you parsed the rhetoric of the moral reformers, it was clear that their analogies to pollution or carcinogens revealed their base-level assumption that games were utterly without redeeming value, lacking any claim to meaningful content or artistic form. Seeing games as art, however, shifted the terms of the debate. Most of these discussions started from the premise that games were an emerging art form that had not yet realized its full potential. Game designer Warren Spector, for example, told a *Joystick 101* interviewer, "We're just emerging from infancy. We're still making (and remaking!) *The Great Train Robbery* or *Birth of a Nation* or, to be really generous, maybe we're at the beginning of what might be called our talkies period. But as Al Jolson said in *The Jazz Singer*, "You ain't heard nothing yet!"[5] In this context, critical discussions sought to promote experimentation and diversification of game form, content, and audience, not to develop prescriptive norms.

These debates were staged at trade shows and academic conferences, in the pages of national magazines (such as *Newsweek* and *Technology Review*) and newspapers (such as the *New York Times*), and in online zines aimed at the gaming community (such as *Joystick 101* and *Gamasutra*). Game designers, policy makers, art critics, fans, and academics all took positions on the questions of whether computer games could be considered an art form and what kinds of aesthetic categories made sense for discussing them.

Games have increasingly influenced contemporary cinema, helping to define the frantic pace and model the multi-directional plotting of *Run Lola Run*, providing the role-playing metaphor for *Being John Malkovich*, encouraging a fascination with the slippery line between reality and digital illusions in *The Matrix*, inspiring the fascination with decipherment and puzzle-solving at the heart of *Memento*, and even providing a new way of thinking about Shakespearean tragedy in *Titus*. Game interfaces and genres have increasingly surfaced as metaphors or design elements in avant-garde installations. Matthew Barney, currently the darling of the museum world, transformed the Guggenheim into a giant video game for one of his *Cremaster* films, having his protagonists battle their way up the ramps, boss by boss.[6] If critics such as *Newsweek*'s Jack Kroll were reluctant to ascribe artistic merit to games, artists in other media seemed ready to absorb aspects of game aesthetics into their work. At high schools and colleges across the country, students discussed games with the same passions with which earlier generations debated the merits of the New American Cinema or the French New Wave. Media studies programs reported that a growing number of their students wanted to be game designers rather than filmmakers.

At the same time, academics were finally embracing games as a topic worthy of serious examination—not simply as a social problem, a technological challenge, a cultural phenomenon, or an economic force within the entertainment industry, but also as an art form that demanded serious aesthetic evaluation.[7] Conferences on the art and culture of games were hosted at MIT, the University of Southern California, the University of Chicago, and the University of West England. As academics have confronted games, they have often found it easier to discuss them in social, economic, and cultural terms than through aesthetic categories. The thrust of media studies writing in recent years has been focused on the category of popular culture and framed through ideological categories, rather than in terms of popular art, a concept that carried far greater resonance in the first half of the twentieth century.

My goal here is not to argue against the value of applying concepts and categories from cultural studies to the analysis of games, but rather to make the case that something was lost when we abandoned a focus on popular aesthetics. The category of aesthetics has considerable power in our culture, helping to define not only cultural hierarchies but also social, economic, and political ones as well. The ability to dismiss certain forms of art as inherently without value paves the way for regulatory policies;

the ability to characterize certain media forms as "cultural pollution" also impacts how the general public perceives those people who consume such material; and the ability to foreclose certain works from artistic consideration narrows the ambitions and devalues the accomplishments of people who work in those media. I will admit that discussing the art of video games conjures up comic images: tuxedo-clad and jewel-bedecked patrons admiring the latest *Street Fighter*, middle-aged academics pontificating on the impact of Cubism on *Tetris*, bleeps and zaps disrupting our silent contemplation at the Guggenheim. Such images tell us more about our contemporary notion of art—as arid and stuffy, as the property of an educated and economic elite, as cut off from everyday experience—than they tell us about games.

The Lively Criticism of Gilbert Seldes

In the following pages I revisit one important effort to spark a debate about the aesthetic merits of popular culture—Gilbert Seldes's 1924 book *The Seven Lively Arts*—and suggest how reclaiming Seldes might contribute to our current debates about the artistic status of computer and video games. Adopting what was then a controversial position, Seldes argued that America's primary contributions to artistic expression had come through emerging forms of popular culture such as jazz, the Broadway musical, vaudeville, Hollywood cinema, the comic strip, and the vernacular humor column.[8] While some of these arts have gained cultural respectability over the past seventy-five years (and others have died out entirely), each was disreputable when Seldes staked out his position. Seldes wanted his book to serve two purposes: first, he wanted to give readers fresh ways of thinking about and engaging with the contents of popular art; second, he wanted to use the vitality and innovation of these emerging forms to challenge the "monotonous stupidity," "ridiculous postures," and "stained glass attitudes" of what we might now call middlebrow culture.[9]

Readers then were skeptical of Seldes's claims about cinema for many of the same reasons that contemporary critics dismiss games—they were suspicious of cinema's commercial motivations and technological origins, concerned about Hollywood's appeals to violence and eroticism, and insistent that cinema had not yet produced works of lasting value. Seldes, on the other hand, argued that cinema's popularity demanded that we re-

assess its aesthetic qualities. Cinema and other popular arts were to be celebrated, he insisted, because they were so deeply imbedded in everyday life, because they were democratic arts embraced by average citizens. Through streamlined styling and syncopated rhythms, they captured the vitality of contemporary urban experience. They took the very machinery of the industrial age, which many felt to be dehumanizing, and found within it the resources for expressing individual visions, for reasserting basic human needs, desires, and fantasies. And these new forms were still open to experimentation and discovery. They were, in Seldes's words, "lively arts." . . .

Games represent a new lively art, one as appropriate for the digital age as those earlier media were for the machine age. They open up new aesthetic experiences and transform the computer screen into a broadly accessible realm of experimentation and innovation. And games have been embraced by a public that has otherwise been unimpressed by much of what passes for digital art. Much as the salon arts of the 1920s seemed sterile alongside the vitality and inventiveness of popular culture, contemporary efforts to create interactive narrative through modernist hypertext or avant-garde installation art seem lifeless and pretentious alongside the creativity and exploration, the sense of fun and wonder, that game designers bring to their craft. As Hal Barwood explained to readers of *Game Developer* magazine in February 2002, "Art is what people accomplish when they don't quite know what to do, when the lines on the road map are faint, when the formula is vague, when the product of their labors is new and unique."[10] Art exists, in other words, on the cutting edge—and that was where games had remained for most of their history. The game designers are creating works that sparked the imagination and made our hearts race. And they are doing so without the safety net that inherited modernist rhetoric provides for installation and hypertext artists. They can offer no simple, straightforward justification for what they are doing or why they are doing it except by way of talking about "the fun factor," that is, the quality of the emotional experience they offer players.

Although Seldes's writing is impressionistic and evocative, rather than developing a systematic argument or framework, one can read *The Seven Lively Arts* as mapping an aesthetic of popular culture that is defined broadly enough to be useful for discussing a wide range of specific media and cultural practices, including many that did not exist when he wrote the book. Seldes drew a distinction between the "great arts," which seek

to express universal and timeless values, and the "lively arts," which seek to give shape and form to immediate experiences and impressions. "Great" and "lively" arts differ "not in the degree of their intensity but in the degree of their intellect."[11] Seldes, in fact, often shows signs of admiring the broad strokes of the popular arts—where the needs for clarity and immediate recognition from a broadly defined audience allowed "no fuzzy edges, no blurred contours"—over the nuance and complexity of Great Art.[12] He consistently values affect over intellect, immediate impact over long-term consequences, the spontaneous impulse over the calculated effect.

Seldes defined art through its ability to provoke strong and immediate reactions. As popular artists master the basic building blocks of their media, they developed techniques that enable them to shape and intensify affective experience. Creativity, Seldes argued, was all bound up with our sense of play and our demands to refresh our sensual apparatus and add new energy to our mental life, which was apt to become dulled through the routine cognition and perception of everyday life. As he put it: "We require, for nourishment, something fresh and transient."[13]

From the start, games were able to create strong emotional impressions—this accounts for their enormous staying power with consumers. Early games such as *Pac-Man* or *Asteroids* could provoke strong feelings of tension or paranoia. The works of Shigeru Miyamoto (*Super Mario Brothers*, *Legend of Zelda*) represented imaginative landscapes, as idiosyncratic and witty in their way as the *Krazy Kat* comic strips or Mack Sennett comedies Seldes admired. Seldes wrote at a moment when cinema was starting to consolidate what it had learned over its first three decades of experimentation and produce works that mixed and matched affective elements to create new kinds of experiences. One could argue that recent games such as *Deus X*, *Grand Theft Auto 3*, and *Shenmue* represent a similar consolidation of earlier game genres, whereas games like *The Sims*, *Majestic*, *Rez*, and *Black & White* are expanding the repertoire of game mechanics and, by doing so, expanding the medium's potential audience.

The great arts and the lively arts share a common enemy, the "bogus arts," the middlebrow arts, which seek to substitute "refinement of taste" for "refinement of technique" and, in the process, cut themselves off from the culture around them.[14] The popular arts, he warned, often promise more than they can deliver; their commercial imperative requires that they leave us somewhat unsatisfied and thus eager to consume more. But in their straightforward appeal to emotion, they do not "corrupt." Mid-

dlebrow culture, however, often seduces us with fantasies of social and cultural betterment at the expense of novelty and innovation. Seldes wanted to deploy the shock value of contemporary popular culture to shake up the settled thinking of the art world, to force it to reconsider the relationship between art and everyday life.

At a time when the United States was emerging as a world leader, Seldes wanted to identify what he felt was a distinctively American voice. He protested, "Our life is energetic, varied, constantly changing; our art is imitative, anemic."[15] Contemporary intellectuals, he felt, had accepted too narrow a conception of what counted as art, seeing America as a new country that had not yet won the approval of its Old World counterparts. Their search for refinement constituted a "genteel corruption," a "thinning out of the blood," which cut them off from what was vital in the surrounding culture. European artists, he suggested, had often revitalized their work by returning to folk art traditions, but operating in a new country with few folk roots, American artists would need to find their vitality through a constant engagement with what was fresh and novel in popular culture. As Seldes explained, "For America, the classic and the folk arts are both imported goods. . . . But the circumstance that our popular arts are home-grown, without the prestige of Europe and of the past, had thrown upon them a shadow of vulgarity, as if they were the products of ignorance and intellectual bad manners."[16]

Seldes wrote at a time when American dominance over popular culture and European dominance over high culture were taken for granted. The aesthetics of contemporary game design, however, operates in a global context. One would have to concede, for example, that our current game genres took shape as a conversation between Japanese and American industries (with plenty of input from consumers and creators elsewhere). Increasingly, American popular culture is responding to Asian influences, with the rise in violence in mass market entertainment a property of heightened competition between Japan, India, Hong Kong, and Hollywood for access to international markets. Action elements surface, not only in games but also in film, television, and comics, because such elements are more readily translated across linguistic and national boundaries.

The need to appeal to a mass consumer, Seldes insisted, meant that popular artists could not give themselves over to morbid self-absorption. Creating works in media that were still taking shape, popular artists were not burdened with a heritage but constantly had to explore new directions and form new relationships with their publics. The lively arts look

toward the future rather than toward the past. Similarly, game designers work in a commercially competitive environment and within an emerging medium. Thus, they must continually push and stretch formal boundaries in order to create novelty, while they also have to insure that their experimentation remains widely accessible to their desired audience. The context is dramatically different with middlebrow art, which often wants to build on well-established traditions rather than rely on formal experimentation, or high art, which can engage in avant-garde experimentation accessible only to an educated elite.

Seldes wrote during an era of media in transition. The cinema was maturing as an expressive medium—making a move from mere spectacle toward character and consequence, from a "cinema of attractions" to a classical storytelling system.[17] A decade earlier, many intellectuals might have freely dismissed cinema as a parlor entertainment whose primary content consisted of little more than chase scenes and pratfalls. A decade later, few would have doubted that cinema had earned its status as one of the most important contemporary arts. Seldes's respect for cinema's popular roots set him at odds with many contemporary critics, who saw the refinement of narrative techniques as essential for the maturation of the medium. Cinema, Seldes argued, "was a toy and should have remained a toy—something for our delight."[18] For Seldes, cinema was not an art despite slapstick; it was an art because slapstick demonstrated that the fullest potentials of motion pictures lay in their ability to capture motion and express emotion. "Everything in slapstick was cinematographic," Seldes proclaimed, remaining deeply suspicious of filmmakers like Thomas Ince or D.W. Griffith, who he feared had sought to impose literary and theatrical standards alien to cinema's core aesthetic impulses.[19] He explained, "The rightness of the spectacle film is implicit in its name: the screen is a place on which things can be seen and so long as a film depends on the eye it is right for the screen."[20]

The maturing of the cinematic medium may well have been what enabled Seldes to recognize its artistic accomplishments. However, in aspiring to cultural respectability, cinema ran a high risk of losing touch with its own primitive roots. Seldes sounded a warning that would seem familiar to many contemporary observers of video and computer games, suggesting that the cinema was confusing technological enhancement with aesthetic advancement, confusing the desire to reproduce reality for the desire to create an emotionally engaging experience. What had given filmgoers the "highest degree of pleasure," he argued, was "escaping ac-

tuality and entering into a created world, built on its own inherent logic, keeping time to its own rhythm—where we feel ourselves at once strangers and at home."[21]

Newsweek's Jack Kroll sparked heated debates in the gamer community when he argued that audiences will probably never be able to care as deeply about pixels on the computer screen as they care about characters in films: "Moviemakers don't have to simulate human beings; they are right there, to be recorded and orchestrated. . . . The top-heavy titillation of *Tomb Raider*'s Lara Croft falls flat next to the face of Sharon Stone. . . . Any player who's moved to tumescence by digibimbo Lara is in big trouble."[22] Yet countless viewers cry when Bambi's mother dies, and World War II veterans can tell you they felt real lust for *Esquire*'s Vargas girls. We have learned to care as much about creatures of pigment as we care about images of real people. Why should pixels be different? If we haven't yet cared this deeply about game characters (a debatable proposition, as the response to Kroll's article indicates), it is because the game design community has not yet found the right techniques for evoking such emotions, not because there is an intrinsic problem in achieving emotional complexity in the medium itself. Kroll, like the respectable critics of early cinema whom Seldes battled, assumes that realism is necessary in order to achieve a high degree of emotional engagement. The art of games may not come from reproducing the world of the senses. As Steve Poole has written:

> Whereas film—at least naturalistic, "live-action" film—is tied down to real spaces, the special virtue of videogames is precisely their limitless plasticity. And only when that virtue is exploited more fully will videogames become a truly unprecedented art—when their level of world-building competence is matched with a comparable level of pure invention. We want to be shocked by novelty. We want to lose ourselves in a space that is utterly different. We want environments that have never been seen, never been imagined before.[23]

Independent game designers such as Eric Zimmerman have argued that games need to return to a garage aesthetic, stripping aside fancy graphics and elaborate cinematics, to reclaim the core elements that make games distinctive from other expressive media. Protesting that games are more than simply "mutant cinema," Zimmerman warns that "mistaken attempts to apply the skills and methods of Hollywood to the world of elec-

tronic gaming resulted in CD-ROMs bloated with full-motion video sequences and lacking meaningful gameplay."[24] Similarly, Seldes warned that long intertitles substituted literary for cinematic values, seeking to "explain everything except the lack of action," and resulting in scenes devoid of visual interest.[25] The results were movies that no longer moved. Zimmerman and others warn that extended cinematics, often the favored means of adding narrative and character to games, cuts the player off from the action and thus sacrifice those elements of interactivity that make games unique. . . . Seldes's concept of the lively arts focuses primarily on the kinetic aspects of popular culture, aspects that can operate inside or outside a narrative frame. Poole arrives at a similar conclusion:

> A beautifully designed videogame invokes wonder as the fine arts do, only in a uniquely kinetic way. Because the videogame *must* move, it cannot offer the lapidary balance of composition that we value in painting; on the other hand, because it *can* move, it is a way to experience architecture, and more than that to create it, in a way which photographs or drawings can never compete. If architecture is frozen music, then a videogame is liquid architecture.[26]

Memorable Moments

What Seldes offers us might be described as a theory of "memorable moments," a concept that surfaces often in discussions with game designers but only rarely in academic writing about the emerging medium. Writing about the German Expressionist film *The Cabinet of Dr. Caligari*, Seldes praises not its plot but its lingering aftertaste: "I cannot think of half a dozen movies which have left so many clear images in my mind."[27] Later in the book, he writes about the pleasures of finding peak experiences within otherwise banal works: "A moment comes when everything is exactly right, and you have an occurrence—it may be something exquisite or something unnameably gross; there is in it an ecstasy which sets it apart from everything else."[28] Such peak experiences seem fully within reach of contemporary game designers in a way that complex causally integrated yet open-ended narratives or psychologically rounded yet fully interactive characters are not. If games are going to become an art, right now, rather than in some distant future, when all of our technical challenges have been resolved, it may come from game designers who are

struggling with the mechanics of motion and emotion, rather than those of story and character.

As game designers evaluate games on the basis of their emotional appeal, their criteria often emphasize moments of emotional intensity or visual spectacle—the big skies that can suddenly open before you when you ride your snowboard in *SSX*, the huge shots in a hockey game when the puck goes much further than it could in real life, the pleasure of sending your car soaring off a cliff or smashing through pedestrians in *Grand Theft Auto 3*. Increasingly, games enable us to grab snapshots of such moments, to replay them and watch them unfold from multiple angles, and to share them with our friends, pushing them to see if they can match our exploits and duplicate our accomplishments. Games companies encourage their staffs to think of designs in terms of the images on boxes or in previews, the way that the demo is going to look on the trade-show floor. Yet, this may be to reduce the concept of memorable moments to "eye candy" or spectacle, something that can be readily extracted from the play experience, something that can be communicated effectively in a still image. . . .

Often, in games, those memorable moments don't simply depend on spectacle. After all, spectacle refers to something that stops you dead in your tracks, forces you to stand and look. Game play becomes memorable when it creates the opposite effect—when it makes you want to move, when it convinces you that you really are in charge of what's happening in the game, when the computer seems to be totally responsive. Frequently, the memorable moment comes when the computer does something that follows logically from your actions, yet doesn't feel like it was pre-scripted and preprogrammed. As *Deus X* designer Warren Spector explains: "Great gameplay comes, I think, from our ability to drop players into compelling situations, provide clear goals for them, give them a variety of tools with which they can impact their environment and then get out of their way. . . . That has to be so much more compelling for players—thrilling even—than simply guessing the canned solution to a puzzle or pressing a mouse button faster than a computer opponent can react."[29]

Seldes was one of a number of early twentieth-century writers who sought to better understand the "mechanics of emotion" that shaped popular entertainment. . . . The Soviet film theorist Sergei Eisenstein developed a theory of "attractions," a term he saw as broad enough to encompass any device—whether formal, narrative, or thematic—that could solicit powerful emotions from a spectator, arguing that film and theater should seek their inspiration from the circus and the music hall.[30] . . . In-

spired in part by Pavlovian reflexology, the early twentieth-century entertainers Seldes discussed tried to document and master basic "surefire" stimuli that could provoke a predictable emotional response from the spectator and then to streamline their works, cutting out anything that would obscure or retard that affective impact. . . . As theater critic Vadim Uraneff explained in 1923, "The [vaudeville] actor works with the idea of an immediate response from the audience: and with regard to its demands. By cutting out everything—every line, gesture, movement—to which the audience does not react and by improvising new things, he establishes unusual unity between the audience and himself."[31]

Game designers engage in a similar process as they seek to identify "what's not in the game," that is, to determine what elements would get in the way of the game mechanic or confuse the player. Game designers speak of "hooks" that will grab consumers' attention and keep them playing, a concept that would have been familiar to vaudeville showman and circus barkers. Longtime game designers cite back to the challenges of developing games that played well in the arcades, which offered a compelling experience that could be staged in under two minutes and ramped up to an emotional high that would leave the player reaching for another quarter. Early console games also demanded economy, given the limited memory capacity of the early systems.[32] However, as consoles have developed greater capacity and thus enabled lengthier and more complex game experiences, some fear that game designers are adding too many features that get in the way of the core mechanics. The lengthy cut scenes of narrative exposition and character backstory, which academics praise for their aesthetic advancements, are often received with hostility by serious gamers because they slow down the play and result in a relatively passive experience. A great deal of effort goes into the design of the first few minutes of a game to insure that they offer a solid emotional payoff for the player rather than ending in frustration: an early moment of mastery or movement helps spark an appetite for bigger and better things to come.[33]

Play as Performance

Seldes and other early twentieth-century critics saw the emotional intensity of popular culture as emerging from the central performer, whose mastery over his or her craft enabled the performer to "command" the spectator's attention. Seldes writes about the "daemonic" authority of Al

Jolson: "he never saves up—for the next scene, or the next week, or the next show. . . . He flings into a comic song or three-minute impersonation so much energy, violence, so much of the totality of one human being, that you feel it would suffice for a hundred others."[34] His contemporary, Robert Lytell, described the characteristics of the best revue performers:

> Human horsepower, size, electricity, energy, zingo. . . . These people have a fire in their belly which makes you sit up and listen whether you want to or not, which silences criticism until their act is over, and you can start thinking again. . . . They seize you and do pretty nearly anything they want with you and while it is going on, you sit with your mouth open and laugh and laugh again.[35]

Such comments reflected the performer-centered aesthetic of vaudeville and the Broadway revue. One might well understand the pleasures of game play according to performance criteria—but as we do so, we need to understand it as a pas de deux between the designer and the player. As game designer David Perry explains, "A good game designer always knows what the players are thinking and is looking over their shoulders every step of the way."[36] The game designer's craft makes it possible for players to feel as if they are in control of the situation at all times, even though their game play and emotional experience are significantly sculpted by the designer. It is a tricky balancing act, making players aware of the challenges they confront while ensuring that they have the resources necessary to overcome those challenges. If the game play becomes transparently easy or impossibly hard, the players lose interest. They need to feel that they can run faster, shoot more accurately, jump further, and think smarter than in their everyday life, and it is this expansion of one's capacity that accounts for the emotional intensity of most games. I still recall the first time I grabbed the controls of *Sonic the Hedgehog*, got a good burst of speed, and started running as fast as I could around the loop-to-loops, collecting gold coins, and sending all obstacles scattering. I am not an especially good game player, yet I felt at that moment totally invincible, and everything in the game's design—the space, the character, the soundtrack—contributed to giving me that sense of effortless control, that release from normal constraints.

As many observers have noted, we don't speak of controlling a cursor on the screen when we describe the experience of playing a game; we act as if we had unmediated access to the fictional space. We refer

to our game characters in the first person and act as if their experiences were our own. James Newman has argued that we might understand the immediacy of game play not in terms of how convincing the representations of the character and the fictional world are but rather in terms of the character's "capacity" to respond to our impulses and desires. A relatively iconic, simplified character may produce an immediate emotional response; a relatively stylized world can nevertheless be immersive. Once we engage with the game, the character may become simply a vehicle we use to navigate the game world. As Newman explains:

> Lara Croft is defined less by appearance than by the fact that "she" allows the player to jump distance x, while the ravine in front of us is larger than that, so we better start thinking of a new way round. . . . Characters are defined around gameplay-affecting characteristics. It doesn't matter that it's a burly guy—or even a guy—or perhaps even a human. That the hang glider can turn faster is a big deal; this affects the way the game plays. This affects my chances of getting a good score.[37]

A number of game designers have reminded me that Shigeru Miyamoto, whom many regard as the medium's first real master, designs his games around verbs, that is, around the actions the game enables players to perform. He wants each game to introduce a new kind of mission, making it possible for the consumer to do something that no other game has allowed before. A close examination of Miyamoto's games also suggests that he designs a playing space that both facilitates and thwarts our ability to carry out that action and thus creates a dramatic context in which the action takes aesthetic shape and narrative significance.

Many contemporary games seek to expand that sense of player mastery beyond the game space, encouraging players to dance to the rhythm, to shake maracas, twist turntables, beat drums, as the domestic space or the arcade space become performance spaces. The spectacular and performative dimensions of these games are summarized by this player's account of his experience of being a *Dance Dance Revolution* devotee:

> The first song starts and finishes, and I did well. I hear a man ask me "How in the hell do you do that?" I just laugh and pick the next

> song, a harder one. I can hear people milling around behind me and I can see their reflection on screen. I hear whispers of "wow", and "damn!" The song ends. I hear a woman shout "Wooooo!" I turn and smile. Her and her friend blush and turn away. . . . Of course, Friday and Saturday nights are the big days to show off. Big crowds, loud crowds, and occasionally rowdy, mean crowds. These are the days for the big dogs, and competition is tough. Very hard songs are done, and feet fly like hummingbird wings. . . . But you take the good with the bad, and it's still fun when you get a good, loud reaction, and there's more than "hoots" to it. There's that feeling when you finally beat that tough song, or when you help a buddy learn to play. It still boils down to just having fun, whether the crowd cheers or not.[38]

Here, the player gets to enjoy the same kind of experience that fueled Jolson's performance—the pleasure of intense and immediate feedback from an engaged audience. At the same time, the game instructs the performance, giving the kinds of structured feedback that enable players to quickly master the necessary skills to impress friends and strangers alike.

The designers of *Frequency* and *Rez*, two recent music-making games, have sought to expand the sensory experience available to players. Both games start with the sensation of traveling at high speeds down winding tunnels of light and color. As we move through these stylized but representational spaces, our interactions help to shape the sound and rhythm of their techno-based soundtracks. As we get into the spirit of the game, we stop thinking simply in terms of our physical movements and become more in tune with the pulse of the music. Such games start to blur the line between play and performance, creating a context where even novice musicians can start to jam and advanced players can create complex and original musical compositions. *Frequency* designer Alex Rigopulos describes the trajectory of a player through his game:

> When a gamer starts to play *Frequency*, he plays it using the gaming skills he already has: the ability to react to symbolic visual information with a precisely timed manual response. . . . What we noticed again and again in playtesting was that there is a certain point at which novice

> players stop playing entirely with their eyes and start playing with their ears (or, rather, their "internal ears"): they start to feel the musical beat; then, as a stream of gems approaches, they look at the oncoming stream, "imagine" in their ears what that phrase will feel like or sound like rhythmically, and begin to "play the notes" (rather than "shoot the gems"). As soon as players cross this threshold, they begin excelling much more rapidly in the game.[39]

Rez's designers have suggested that they based their designs on the theories of abstract artist Wassily Kandinsky: "*Rez* is an experience, a fusion of light, vibration and sound completely immersed in synaesthesia."[40] Here, the game controller vibrates and even develops the rhythm of a heartbeat in response to the player's actions, creating yet another dimension to what is a complex multimedia experience.

These games build on the excess kinetic energy that has always surrounded play. Watch children play games: they sway with the movement of the figures on the screen and bounce with the action, totally engaged with the moment. One could argue that such responses reflect the degree of control they feel over what happens on the screen. We speak not just of controlling the characters but of "owning" the space of the game. It is even more interesting to observe the responses of people watching them play, since they also mimic the actions that are occurring on the screen, even though their actions have no consequences on the game play. Cinema has never achieved this same visceral impact, unless we are talking about the kind of fairground attractions that are designed to give us the sensation of driving down a racetrack or riding a rollercoaster. People do sometimes feel like they are about to fall out of their seats when watching an IMAX image, for example. Games routinely create the same degree of immersion without having to surround us completely. Sometimes they achieve it by the use of first-person perspective, but one can have the same sensation watching an early Mario Brothers game that relies totally on third person point of view and a relatively iconographic landscape. One could argue that it is our knowledge of the interactive potential of games that produces these kinetic effects, yet I have observed similar kinds of behavior from people watching prerecorded clips from games, suggesting that the response has as much to do with the visual presentation of the action as any real-time engagement with the controller.

Expressive Amplification

David Bordwell makes a similar argument about the Hong Kong action film:

> We need no special training to grasp vigorous, well structured movement. More exactly, it's not so much that we grasp it as that it grabs us; we respond kinesthetically, as when we tap our toes to music, or hammer the air at a basketball game. These films literally grip us; we can watch ourselves tense and relax, twitch or flinch. By arousing us through highly legible motion and staccato rhythms, and by intensifying their arousal through composition and editing and sound, the films seem to ask our bodies to recall elemental and universal events like striking, swinging, twisting, leaping, rolling.[41]

By now, the aesthetics of the action movie and the video game are hopelessly intertwined: game aesthetics have clearly and directly shaped the emergence of the genres Bordwell discusses; at the same time, game designers have consciously internalized lessons from filmmakers like Akira Kurosawa, James Cameron, and John Woo. As game criticism emerges as a field, it will need to address not only the stories that games tell or the kinds of play that they facilitate, but also the formal principles that shape our emotional responses to them. Bordwell's account of the Hong Kong martial arts movie suggests two intertwined factors: first, the ways that commonly staged actions appeal to bodily memories; and second, the ways that various aesthetic devices can intensify and exaggerate the impact of such actions, making them both more legible and more intense than their real-world counterparts.

Bordwell describes this second process as "expressive amplification."[42] Action-film directors combine circus acrobatics and special effects with rapid-fire editing and stylized sound effects to amp up the intensity of a fight sequence. Similarly, game designers use movement, "camera" angle, sound effects, and other devices to exaggerate the impact of punches or to expand the flight of a skateboarder. The protagonists in *Jet Grind Radio* run riot through the streets of a futuristic Tokyo, sliding up and down ramps or along rails at high speeds, their in-line skates sending out a shower of sparks, the sounds of the cops' boots pounding right on their heels, and the crackle of the police radio breathing down their necks.

Here, we see "expressive amplification" at work. We take pleasure not simply in the outcome of the players' actions but the style with which they/we execute them.

Games and Silent Cinema

And this brings us back to what Seldes had to say about the cinema. The police in *Jet Grind Radio* display the exaggerated dignity and one-track thinking we associate with the Keystone Cops, as they hurl themselves onto the protagonist and end up in a heap, face down on the asphalt. Silent cinema, Seldes argued, was an art of expressive movement. He valued the speed and dynamism of Griffith's last-minute races to the rescue, the physical grace of Charlie Chaplin's pratfalls, and the ingenuity of Buster Keaton's engineering feats. He argued that each silent performer developed a characteristic way of moving, a posture, and a rhythm that defined him for the spectator the moment he appeared on the screen. Chaplin "created his own trajectory across the screen which was absolutely his own line of movement."[43] This distinctive way of moving occurred through stylization, reducing screen action to simple units of action, which could recur across a broad range of narrative situations. Moviegoers came to love the slight bounce in Chaplin's walk, the daintiness of his hands, his slightly bow-legged stance.

Games also depend upon an art of expressive movement, with characters defined through their distinctive ways of propelling themselves through space. Game designers have had to reduce character to a limited range of preprogrammed expressions, movements, and gestures, but as they have done so, they have produced characters, like Mario and Luigi or Sonic, who are enormously evocative, who provoke strong emotional reactions.

The art of silent cinema was also an art of atmospheric design. To watch a silent masterpiece like Fritz Lang's *Metropolis* is to be drawn into a world where meaning is carried by the placement of shadows, the movement of machinery, and the organization of space. If anything, game designers have pushed beyond cinema in terms of developing expressive and fantastic environments that convey a powerful sense of mood, provoke our curiosity and amusement, and motivate us to explore. The German Expressionists had to construct the world's largest soundstage to insure that every element in their shots was fully under their control. Game de-

signers start with a blank screen: every element is there because they chose to put it there, so there is no excuse for elements that do not capture our imagination, shape our emotions, or convey meanings. Game designers are seeking inspiration from stage design, amusement park "imagineering," and postmodern architecture as they develop a better understanding of spatial design. Across a range of essays, I have made the case that games might best be discussed through a spatial aesthetic, one which sees the art of game design as a kind of narrative and affective architecture, as linked in important ways to the art of designing amusement park attractions.[44] I have argued that games compensate their players for their loss of mobility, at a time when children enjoy diminished access to real-world play spaces.[45] With Kurt Squire, I have expanded that analysis to look more closely at the ways in which a range of games create spaces that encourage our exploration and are well-designed as staging grounds for conflicts.[46]

Many of the most memorable moments in the silent films Seldes discussed centered on the struggles of characters against spatial features. Consider, for example, the extended sequence in *Safety Last* where Harold Lloyd must climb the side of a building, floor by floor, confronting a series of obstacles, and ends up hanging from the hands of a clock. To be sure, some of the sequence's fascination has to do with the photographic basis of cinema—the fact that Lloyd is actually hanging several stories off the ground (a stunt rendered all the more remarkable by the fact that Lloyd was missing several fingers from one of his hands). Yet, the scene also depends on a challenge-mastery-complication structure remarkably similar to that found in contemporary games: the higher Lloyd climbs the more intense the risk and the more likely he is to fall. Will future generations look back on *Tomb Raider*'s Lara Croft doing battle with a pack of snarling wolves as the early twenty-first-century equivalent of Lillian Gish making her way across the ice floes in *Way Down East*?

In making these analogies, I am not necessarily advocating that games should become more cinematic, any more than Seldes felt cinema should become more theatrical or literary. Game designers should study a wide range of arts, searching not only for what they have done best but also for what they have failed to achieve, for those "roads not taken" that might be more fully realized within a game aesthetic. Game designers will need to experiment with the broadest possible range of approaches and styles, breaking with the still somewhat limited conventions of the existing game

genres in some cases and deepening our appreciation of their potentials in others. In the end, games may not take the same path as cinema. Game designers will almost certainly develop their own aesthetic principles as they confront the challenge of balancing our competing desires for storytelling and interactivity. As Spector explains:

> The art in gaming lies in the tension between the elements we put in our game worlds and what players choose to do with those elements. The developers who get that—the ones who aren't just making expensive, sophisticated pick-a-path books or movies where you get to determine what the next shot is—are the ones who will expand the boundaries of this new art form.[47]

It remains to be seen whether games can give players the freedom they want and still provide an emotionally satisfying and thematically meaningful shape to the experience. Some of the best games—*Snood* and *Tetris* come to mind—have nothing to do with storytelling. For all we know, the future art of games may look more like architecture or dance than cinema.

The Future of Gaming

If we are to see games accepted as a contemporary art form, game designers are going to have to stop using "market pressures" as an excuse for their lack of experimentation. True, game designers need to ship product, and that can place serious limitations on how much innovation can occur within a single game. Yet, it is worth remembering that all art occurs within an economic context. The Hollywood filmmakers of the 1920s and 1930s often produced five to seven feature films per year, yet somewhere in that rush to the marketplace, they nevertheless came to more fully realize the potentials of their medium and developed artworks that have withstood the test of time. What keeps the lively arts lively is that they are the site of consistent experimentation and innovation. No sooner are genre conventions mapped than popular artists start to twist and turn them to yield new effects. The constant push for emotional immediacy demands a constant refinement of the art itself, keeping creators on their toes and forcing them to acknowledge audience response into their creative decision-making.

Seldes worried whether the conditions that had led to an enormous flowering of popular arts in the early twentieth century could be sustained in the face of increasingly industrialized modes of production. He blamed the studio system for much of what was wrong with contemporary cinema, yet he ended the book with a prediction that the costs of film production were likely to decrease steadily as the core technology of film production became standardized, thus returning filmmaking to its artisan roots. He predicted: "The first cheap film will startle you; but the film will grow less and less expensive. Presently it will be within the reach of artists. . . . The artists will give back to the screen the thing you have debauched—imagination."[48] Several decades later, in his book *The Great Public*, Seldes would be even more emphatic that the rise of corporate media had strangled the aesthetic experimentation and personal expression that had enabled these "lively arts" to exist in the first place.[49] With the coming of sound, the costs of film production had increased, further consolidating the major studios' control over the filmmaking process, and thus delaying by several decades the rise of independent cinema he had predicted.

What does this suggest about the future of innovation in game design? For starters, the basic apparatus of the camera and the projector were standardized by the turn of the century, enabling early filmmakers to focus on the expressive potential of the medium rather than continuing to have to relearn the basic technology. Game designers, on the other hand, have confronted dramatic shifts in their basic tools and resources on an average of every eighteen months since the emergence of their medium. This constant need to respond to a shifting technological infrastructure has redirected attention toward mastering tools that could have been devoted to exploring the properties and potentials of the medium. Second, despite a pretty rigorous patents war, the early history of filmmaking was marked by relatively low barriers of entry into the marketplace. Although many film histories still focus on a small number of key innovators, we now know that the basic language of cinema emerged through widespread experimentation among filmmakers scattered across the country and around the world. The early history of computer games, by contrast, was dominated by a relatively small number of game platforms, with all games having to pass through this corporate oversight before they could reach the market. The proliferation of authoring tools and open-source game engines have helped to lower barriers of entry into the game marketplace, paving the way for smaller and more independent game com-

panies. In such a context, those emerging companies have often been forced to innovate in order to differentiate their product from what was already on the market.

At the same time as these new delivery technologies have loosened the hold of the platform manufacturers over game content, the cost of game development for those platforms has dramatically increased. We have seen rising technical standards that make it difficult for garage game designers to compete. Some have worried that the result will be an increased focus on blockbuster games with surefire market potential and the constant upgrading of popular franchises. What would contemporary cinema look like if it supported a succession of summer popcorn movies but could not support lower-budget and independent films?