



GAMES, THE NEW LIVELY ART

By Henry Jenkins

“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 inn 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 and 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 X-Box, and the Nintendo Game Cube

signals a dramatic increase in the resources available to game designers.

In anticipation of these new technological breakthroughs, people within and beyond the game industry began to focus attention 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 push them forward towards 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 towards 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, one which had not yet realized its full potentials. Game designer Warren Specter, 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 *Joystick101* and *Gamasutra*). Game designers, policy makers, art critics, fans, and academics all took a position on the question of whether computer games could be considered an art form and what kinds of aesthetic categories made sense for discussing them.

Games increasingly influence 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 New York art museum, transformed the Guggenheim into a giant video game for one of his

Cremaster films, having his protagonist battle their way up the ramps, boss by boss.⁶ If critics, like 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 want 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 which 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 around the category of popular culture and been framed through ideological categories, rather than in terms of popular art, a concept which carried far greater resonance in the first half of the 20th century.

My goal here is not to argue against the values 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 *Streetfighter*, 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

What I want to do in the following pages is revisit one important effort to spark a debate about the aesthetic merits of popular culture – Gilbert Seldes’

Seven Lively Arts (1924) – 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 75 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,” “the ridiculous postures,” and “stained glass attitudes” of what we might now call Middle Brow culture.⁹

Readers then were skeptical of Seldes’ 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 reassess its aesthetic qualities. Cinema and other popular arts were to be celebrated, Seldes 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 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’ words, “lively arts.”

My thinking about Seldes’ value for reflecting on game aesthetics first took shape when I was sitting in the audience at the USC Interactive Frictions conference and heard two panels back to back, one composed of digital artists, the other of game designers. The first discussion was sluggish and pretentious; the artists were trying – without much success – to describe what the computer brought to their art, but they kept falling back on high modernist and early postmodernist categories. I knew exactly what they were going to say before they opened their mouths. On the other hand, the game designers were struggling to find words and concepts to express fresh discoveries about their media; they were working on the very edge of the technology, stretching it to its limits, and having to produce work which would fascinate an increasingly jaded marketplace. They were keeping on the top of their toes trying to learn not only from their own production practices but from each other. I scribbled on my notepad, “If art enlivens and commerce deadens, then how do we explain the immediacy of this panel and

the dullness of the previous one.” I suddenly flashed on Seldes’ characterization of the attitude that dominated the art institutions and criticism of the early 20th century: “What is worthwhile must be dull. We suffer fools gladly if we can pretend they are mystics.”¹⁰

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 realm of experimentation and innovation that is broadly accessible. 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.”¹¹ Art exists, in other words, on the cutting edge and that was where games had remained for most of their history. The game designers were creating works that sparked the imagination and made our hearts race. And they were 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 doing it except by way of talking about “the fun factor,” that is, the quality of the emotional experience they offer players.

Although his writing was 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, one which is broadly enough defined to be useful for discussing a wide range of specific media and cultural practices including many that did not exist at the time 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 differed “not in the degree of their intensity but in the degree of their intellect.”¹² Seldes, in fact, often showed 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.¹³ Seldes consistently values affect over intellect, immediate impact over long term consequences, the spontaneous impulse over the calculated effect.

Seldes defined art through its affective force, its ability to provoke strong and immediate reactions. As popular artists master the basic building block

of their media, they developed techniques enabling them to shape and intensify affective experience. Creativity, Seldes argued, was all bound up with our sense of play and with 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. He wrote, “we require, for nourishment, something fresh and transient.”¹⁴

From the start, games were able to create strong emotional impressions – this accounts for the enormous staying power with consumers. An early game of *Pac-man* or *Asteroids* could provoke strong feelings of tension or paranoia. The works of Shigeru Miyagawa 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*, or *Shenmue*, represent a similar consolidation of earlier game genres, where-as games like *The Sims*, *Majestic*, *Rez* or *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 shared a common enemy, the “bogus arts,” the middle brow arts, which sought to substitute “refinement of taste” for “refinement of technique,” and in the process, cut themselves off from the culture around them.¹⁵ The popular arts, he warned, often promised more than they could deliver; their commercial imperative required that they leave us somewhat unsatisfied and thus eager to consume more, but in their straightforward appeal to emotion, they do not “corrupt.” Middlebrow 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.”¹⁶ Contemporary intellectuals, he felt, had accepted too narrow a conception of what counted as art, seeing America as a new country which 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.”¹⁷

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 had to constantly 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 when one turns their attention to 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 towards character and consequence, from a “cinema of attractions” to a classical storytelling system.¹⁸ 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’ 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.” [19](#) For Seldes, cinema was not an art despite slapstick; it was an art because slapstick had helped us to realize 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.[20](#) 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.”[21](#)

The maturing of the cinematic medium may well have been what enabled Seldes to recognize its artistic accomplishments. However, in aspiring towards cultural respectability, cinema ran a high risk of losing touch with its own primitive roots. Seldes sounded a warning which 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 actuality 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.” [22](#)

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.”[23](#) 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 indicated), it is because the game design community has not yet found the right techniques for evoking such emotions, and 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.”[24](#)

As I visit game companies, I see some of the industry’s best minds struggling with this challenge. As they search for answers, they will need to avoid the temptation to port solutions over wholesale from cinema and other more established arts. 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 electronic gaming resulted in CD-ROMs bloated with full-motion video sequences and lacking meaningful gameplay.” [25](#) 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. [26](#) The result were movies that no longer moved. Zimmerman and others warn that extended cinematics, often the favored mean of adding narrative and character to games, cuts the player off from the action and thus sacrifice those elements of interactivity which make games games. One could argue that a similar tension is at the heart of the ongoing debates among game scholars between the so-called narratologists and the ludologists. The ludologists fear that the narratologist want to impose an alien aesthetic sensibility onto games and thus cut the medium off from its basic building blocks in gameplay. Games should not achieve aesthetic recognition by giving themselves over to “cinema envy,” they warn, but should remain true to their roots. Seldes’s concept of the lively arts may, in fact, offer us a way out of this binary, since he 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.” 27

Memorable Moments

What Seldes offers us might be described as a theory of “memorable moments,” a concept which 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.”²⁸ Or 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.”²⁹ Such peak experiences seem fully within reach of contemporary game designers in a way that the development of complex causally-integrated yet open-ended narratives or psychological 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 snow board in *SSX*, the huge shots in a hockey game when the puck goes much further than it could possibly do 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 accomplishments. Game companies encourage their staffs to think of their 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 down to “eye candy” or spectacle, something which can be readily extracted from the play experience, something which can be communicated effectively in a still image. Other game designers would contest this understanding of the concept, arguing that memorable moments emerge when all of the elements of the medium come together to create a distinctive and compelling experience.

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 prescribed 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.”³⁰

Seldes was one of a number of early 20th century writers who sought to better understand the “mechanics of emotion” which shaped popular entertainment. The Italian futurist Flippo Marinetti saw within the variety theater “the crucible in which the elements of an emergent new sensibility are seething,” describing it as an art which had “only one reason for existing and triumphing: incessantly to invent new elements of astonishment.”³¹ The Soviet film theorist Sergei Eisenstein developed a theory of “attractions,” a term which he saw as broad enough to encompass any device – whether formal, narrative, or thematic – which could solicit powerful emotions from a spectator, arguing that film and theater should seek their inspiration from the circus and the music hall.³² Inspired in part by Pavlovian reflexology, they tried to document and master basic “surefire” stimuli which 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. Eddie Cantor warned, “A comedian in vaudeville...is like a salesman who has only fifteen minutes in which to make a sale. You go on stage knowing every moment counts. You’ve got to get your audience the instant you appear.”³³ 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.”³⁴

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” which will grab the consumers attention and keep them playing, a concept which would have been familiar to vaudeville showman and circus barkers. Longtime game designers cite back to the challenges of developing games which 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. ³⁵ 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 which 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 first few minutes of game play, in particular, to insure that they offer a solid emotional payoff for the player rather than ending in frustration: an early moment of mastery or movement is to spark their appetite for bigger and better things to come. [36](#)

Play as Performance

Seldes and the other early 20th century critics saw the emotional intensity of popular culture as emerging from the central performer, whose mastery over his or her craft enabled them 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.” [37](#) 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.” [38](#)

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.” ³⁹ The game designer’s craft makes it possible for the player to feel as if they are in control of the situation at all time, even though their game play and emotional experience is significantly sculpted by the designer. It is a tricky balancing act, making the player aware of the challenges they confront, and at the same time, insuring they have the resources necessary to overcome those challenges. If the game play becomes transparently easy or impossibly hard, the players lose interest. The players need to feel they can

run faster, shoot more accurately, jump further, and think smarter than in their everyday life and it is this expansion of the player's capacity which 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 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 layout of the space, the properties of the character, the selection of 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 representation of the character and the fictional world is 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."
" [40](#)

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 which 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 suggests, at the same time, that he designs a playing space which at once facilitates and thwarts our ability to carry out that action and thus creates a dramatic context in which these actions take 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.” 42

Here, the player gets to enjoy the same kind of experience that fueled Jolson or Cantor's performances – 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 enables 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.” 43

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.”⁴⁴ Here, the game controller vibrates and even develops the rhythm of a heart beat 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 gameplay. Watch children play games and they sway with the movement of the figures on the screen, bouncing 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 which 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 which 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 totally surround us. 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 which produces these kinetic effects, yet I have observed similar kinds of behavior from people watching pre-recorded 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.”[45](#)

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 and at the same time, game designers have consciously internalized lessons from filmmakers like Akira Kurosowa, 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, here, 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 the actions, making them both more legible and more intense than their real world counterpoints.

Bordwell describes this second process as “expressive amplification.”[46](#) 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 player's 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 Chaplin's pratfalls and the ingenuity of Buster Keaton's engineering feats. He argued that each silent performer developed their own

characteristic way of moving, their own posture, their own rhythm, which defined them for the spectator the moment they appeared on the screen. Chaplin “created his own trajectory across the screen which was absolutely his own line of movement.” 47 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. James Agee would make a similar claim in his essay, “Comedy’s Greatest Era,” describing the unique personalities on screen as emerging from a rhetoric of comic clichés:

“The man who could handle them properly combined several of the more difficult accomplishments of the acrobat, the dancer, the clown, and the mime. Some very gifted comedians, unforgettably Ben Turpin, had an immense vocabulary of these clichés and were in part so lovable because they were deeply conservative classicists and never tried to break away from them. The still more gifted men, of course, simplified and invented, finding out new and much deeper uses for the idiom. They learned to show emotion through it, and comic psychology, more eloquently than most language has ever managed to, and they discovered beauties of comic motion which are hopelessly beyond the reach of words.” 48

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 down 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 sound stage so that they could insure that every element in their shot was fully under their control. Game designers start with a blank screen: every element is there because they chose to put it there and so there is no excuse for elements which do not capture the 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.⁴⁹ I have argued that games compensate their players for their loss of mobility across real world spaces, at a time when children enjoy diminished access to real world play spaces.⁵⁰ With Kurt Squire, I have expanded that analysis to look more closely at the ways that a range of games create spaces which encourage our exploration and which are well-designed as staging grounds for conflicts.⁵¹

Many of the most memorable moments in the silent films Seldes discussed centered around 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 face. 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 is 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 21st 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 different arts, searching not only for what they have done best but also for what they have failed to achieve, for those “roads not taken” which 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.”[52](#)

It remains to be seen whether games can provide 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.

Mode of Production

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 that has withstood the test of time. Seldes describes popular art in terms of a careful balance between convention and invention: convention insures accessibility, invention novelty. 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 are likely to decrease steadily as the core technology of film production becomes standardized, thus returning filmmaking to its artisan roots. He predicts: “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.”[53](#) 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 which had enabled these “lively arts” to exist in the first place.[54](#) With the coming of sound, the costs of film production had increased rather than decreased, 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 average every 18 months since the emergence of their medium. This constant need to respond to a shifting technological infrastructure has shifted attention onto mastering tools which could otherwise have been devoted to exploring the properties and potentials of the medium. Secondly, 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 amongst 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 more independent and smaller game companies. 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. The rise of the girls game movement, for example, can be explained in terms of female-run start-ups seeking to expand the game market in order to create a niche for their product in the face of competition with larger corporations.

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 which 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. The situation is not totally hopeless. The sheer size of some of the major game publishers has encouraged them to diversify game design and content. A company like Electronic Arts, for example, draws on profits from its cash cow sports games to sustain a variety of smaller boutique companies, such as Maxis or Bullfrog, which are producing some of the most original and genre-breaking content.

The Value of Criticism

How can we insure the continued creative evolution of games? What will games look like as a mature artform, given the extraordinary shifts it has undergone over the past few decades? What modes of production or forms of authorship will insure the diversification necessary to expand the core gaming market to reach a broader public? Seldes was quite clear that sustained and rigorous criticism of the “lively arts” was the key to their long-term development. Such criticism must start from a sympathetic position, one which takes the popular arts on their own terms, one which respects the defining properties of specific media and genres. This criticism offers a measure of success quite independent from, but every bit as important as, the results of the box office. As he explains, “the box office is gross; it detects no errors, nor does it sufficiently encourage improvement.”⁵⁵ Criticism encourages experimentation and innovation; commercial pressures insure accessibility. The lively arts grow through a careful balancing between the two.

The nature and value of these aesthetic experiments warrant close and passionate engagement not only within the games industry or academia, but also by the press and around the dinner table. Even Kroll’s grumpy dismissal of games has sparked heated discussion and forced designers to refine their own grasp of the medium’s distinctive features. Imagine what a more robust form of criticism could contribute. We need critics who know and care about games the way Pauline Kael knew movies. We need critics who write about them with that same degree of wit, wisdom, and passion. Early film critics played vital functions in documenting innovations and speculating about their potential. As a new media, computer games demand this same kind of close critical engagement. We have not had time to codify what experienced game designers know, and we have certainly not yet established a canon of great works that might serve as exemplars. There have been real creative accomplishments across the first three decades of game design, but we haven’t really sorted out what they are and why they matter.

The problem with many contemporary games isn’t that they are violent but that so many of them are banal, formulaic, and predictable. Thoughtful criticism can marshal support for innovation and experimentation in the industry, much as good film criticism helps focus attention on neglected independent films. At the present time, game critics represent a conservative force on aesthetic innovation, with most reviews organized around pre-existing genre preferences. They are also mostly organized around technical elements as opposed to the game’s emotional impact or its aesthetic statement. It is hard, in many cases, for truly innovative games to get the attention of consumers, though the success of products like *The Sims* suggest it is certainly not impossible.

Thoughtful criticism could even contribute to our debates about violence. Rather than bemoaning “meaningless violence,” we should explore ways

that games could not simply stage or simulate violence but offer us new ways to understand the place of violence within our culture. Moreover, game criticism may provide a means of holding the game industry more accountable for its choices. In the wake of the Columbine shootings, game designers are struggling with their ethical responsibilities as never before, searching for ways of appealing to empowerment fantasies that don't require exploding heads and gushing organs. A serious public discussion of this medium might constructively influence these debates, helping identify and evaluate alternatives as they emerge.

As Seldes grew older, his initial enthusiasm for the “daemonic” force of popular art gave rise to growing concerns that it could be used to negatively shape public opinion and he became a key supporter of Frederic Wertham's campaign to regulate comic books. [56](#) Seldes' career trajectory – from defender of *Krazy Kat* to persecutor of E.C. horror comics – suggests the ambivalence at the heart of his celebration of the “lively arts.” We should recognize that ambivalence within our own response to games as an emerging medium and use our criticism to debate the merits of different approaches to representing violence in games. [57](#) The goal should be the creation of a context which supports more thoughtful game content rather than the promotion of censorship.

As the art of games matures, progress will be driven by the most creative and forward thinking minds in the industry, those who know that games can be more than they have been, those who recognize the potential of reaching a broader public, of having a greater cultural impact, of generating more diverse and ethically responsible content and of creating richer and more emotionally engaging content. But without the support of an informed public and the perspective of thoughtful critics, game developers may never realize that potential.

[1](#) Shigeru Miyamoto as quoted in Marc Saltzman (Ed.) *Game Design Secrets of the Sages*, Second Edition (Indianapolis: MacMillan, 2000), p.10.

[2](#) Jack Kroll, “Emotional Engines? I Don't Think So,” *Newsweek*, February 27 2000.

[3](#) Hal Barwood, “The Envelope Please?,” *Game Developer*, February 2002, pp.

[4](#) The core argument in this essay initially took shape as remarks presented at the Video and Computer Games Come of Age conference, jointly sponsored by the MIT Comparative Media Studies Program and the Interactive Digital Software Association. It was presented as a talk at various venues, including the Game Developers Conference, The Electronic Entertainment Exposition, Queensland Institute of Technology, and the

University of Western England-Bristol. It was expanded and published as “Artform for the Digital Age,” *Technology Review*, September-October 2000, and subsequently reprinted in an abbreviated form in the *New York Times* Arts and Entertainment Section. I am grateful for the feedback it has received in these various venues. I am especially thankful to advice on this current revision from Kurt Squire, Alex Chisholm, Philip Tan Boon, Eric Zimmerman, and Kevin Johnson, as well as the insights of the larger Games to Teach team and the great variety of people in the games industry who have volunteered their time to help us with our efforts.

5 Kurt Squire, “Educating Game Designers: An Interview with Warren Spector,” <http://www.joystick101.org/?op=displaystory&sid=2001/5/23/155255/302>

6 For more on Matthew Barney and his relationship to the aesthetics of popular culture, see Henry Jenkins, “Monstrous Beauty and the Mutant Aesthetic: Rethinking Matthew Barney’s Relationship to the Horror Genre,” <http://web.mit.edu/21fms/www/faculty/henry3/horror.html>.

7 For example, see Noah Wardrip-Fruin and Pat Harrigan (Ed.) *First Person* (Cambridge: MIT Press, forthcoming) ; Lucian King and Conrad Bain (eds.), *Game On* (London: Barbican, 2002); *Game Studies*, <http://www.gamestudies.org/> ; or the current volume as examples of the new scholarship emerging around games.

8 For a useful overview of Seldes’s contributions to American arts and letters, see Michael G. Kammen, *The Lively Arts: Gilbert Seldes and the Transformation of Cultural Criticism in the United States* (Oxford: Oxford University Press, 1996). It should be noted that while he borrowed the concept of the Seven Arts from the classical tradition, the book remains ambiguous about how to breakdown the topics he discusses into seven distinct traditions. What one takes from Seldes is less a taxonomy of popular arts than a way of understanding the relationship of popular, middlebrow, and high art.

9 Gilbert Seldes, *The Seven Lively Arts* (New York: Sagmore Press, 1957), p. 193.

10 Seldes, p. 264.

11 Barwood, p. .

12 Seldes, p. 272.

13 Seldes, p. 228.

[14](#) Seldes, p.293. Seldes's arguments about sensory restoration need to be understood in the context of larger discourses about sensation and expression at the turn of the century. For an overview of those discussions, see Ben Singer, *Melodrama and Modernity: Early Sensational Cinema and Its Contexts* (New York: Columbia University Press, 2001) and Henry Jenkins, *What Made Pistachio Nuts?: Early Sound Comedy and the Vaudeville Aesthetic* (New York: Columbia University Press, 1992).

[15](#) Seldes, p. 223.

[16](#) Seldes, p.300.

[17](#) Seldes, p.299

[18](#) These shifts have attracted considerable scholarly attention within film studies circles. For a useful overview of these historical transitions, see Thomas Elsaesser and Adam Barker (Eds.) *Early Cinema: Space-Frame-Narrative* (London: BFI, 1990).

[19](#) Seldes, p.288.

[20](#) Seldes, p. 16.

[21](#) Seldes, p. 18.

[22](#) Seldes, p. 288.

[23](#) Kroll, *ibid.*

[24](#) Steven Poole, *Trigger Happy: Videogames and the Entertainment Revolution* (New York: Arcade Publishing, 2000), pp. 218-220

[25](#) Frank Lantz and Eric Zimmerman, "Checkmate: Rules, Play and Culture," *Merge*, 1999, <http://www.ericzimmerman.com/acastuff/checkmate.html>. See also Eric Zimmerman, "Do Independent Games Exist?" in , in Lucian King and Conrad Bain (eds.), *Game On* (London: Barbican, 2002: "**Games suffer from cinema envy.** What passes for "realism" in games is an awkward and unimaginative use of 3D computer graphics. It's time for game developers to stop trying to replicate the pleasures of film. Games need to find their own forms of expression, capitalizing on their unique properties as dynamic, participatory systems.")

[26](#) Seldes, p. 286.

[27](#) Poole, p.226.

[28](#) Seldes, p.19.

[29](#) Seldes, p.186.

[30](#) Squire, *ibid.*

[31](#) Flippo Tommaso Marintetti, "The Variety Theatre," in Michael Kirby (ed.) *Futurist Performance* (New York: Dutton, 1971), pp.179-186.

[32](#) Sergei Eisenstein, "Montage of Attractions," *Drama Review*, March 1974, pp.77-85.

[33](#) Eddie Cantor as quoted in Mary B. Mullet, "We All Like the Medicine 'Doctor' Eddie Cantor Gives," *American Magazine*, July 1924, pp.34ff.

[34](#) Vadim Uraneff, "Commedia Dell'Arte and American Vaudeville," *Theatre Arts*, October 1923, p.326.

[35](#) For a useful discussion of the aesthetics of early video games, see Van Burnham and Ralph H. Baer, *Supercade* (Cambridge: MIT Press, 2001).

[36](#) I am indebted to the participants of the Comparative Media Studies-Electronic Arts Creative Leaders workshop series for these insights into the game design process.

[37](#) Seldes, p. 175.

[38](#) Robert Lytell, "Vaudeville Old and Young," *New Republic*, July 1 1925, p.156

[39](#) David Perry as quoted in Saltzman, p.18.

[40](#) James Newman, "On Being a Tetraminoe: Mapping the Contours of the Videogame Character," paper delivered at the International Game Cultures Conference, Bristol, England, June-July 2001.

[42](#) Dikarika, "Tales from a DDR Adict," Joystick 101, <http://www.joystick101.org/?op=displaystory&sid=2002/1/12/133339/317>

[43](#) Alex Rigopulos, E-mail Correspondence with the author, March 1 2002.

[44](#) "Gamers Set for Sensory Overload," *BBC News*, March 1 2002, http://news.bbc.co.uk/1/hi/english/sci/tech/newsid_1846000/1846561.stm

[45](#) David Bordwell, *Planet Hong Kong: Popular Cinema and the Art of Entertainment* (Cambridge: Harvard University Press, 2000), p.244.

[46](#) Bordwell, p.232

[47](#) Seldes, p.37.

[48](#) James Agee, "Comedy's Greatest Era," in Gerald Mast and Marshall Cohen (Eds.), *Film Theory and Criticism* (New York: Oxford University Press, 1974), p.439. For a fuller discussion of Agee's theory of comic performance, see Henry Jenkins and Kristine Brunovska Karnick, "Acting Funny," in Kristine Brunovska Karnick and Henry Jenkins (Eds.) *Classical Hollywood Comedy* (New York: Routledge/AFI, 1995).

[49](#) Henry Jenkins, "Game Design as Narrative Architecture," in Noah Wardrip-Fruin and Pat Harrigan (Ed.) *First Person* (Cambridge: MIT Press, forthcoming).

[50](#) Henry Jenkins, "Complete Freedom of Movement': Video Games as Gendered Play Spaces" in Justine Cassell and Henry Jenkins (eds.) *From Barbie to Mortal Kombat: Gender and Computer Games* (Cambridge: MIT Press, 1998).

[51](#) Kurt Squire and Henry Jenkins, "The Art of Contested Spaces," in Lucian King and Conrad Bain (eds.), *Game On* (London: Barbican, 2002).

[52](#) Squire, *ibid.*

[53](#) Seldes, p.289.

[54](#) Gilbert Seldes, *The Great Audience* (New York: Viking, 1950).

[55](#) Seldes, *The Seven Lively Arts*, p. 303.

[56](#) Seldes, *Great Audience*, pp. 271-278, offer the fullest summary of his views on the comic book industry.

[57](#) See James Cain and Henry Jenkins, "'I'm Gonna Git Medieval on Your Ass: A Conversation about Violence and Culture,'" in Helaine Postner (Ed), *Culture of Violence* (Amherst: University of Massachusetts Press, 2002).
