CHAPTER 18

Interactive Cinema

Movie stories traditionally follow a linear path, and moviegoing has always been a passive experience, so how do you open up a movie to a nonlinear narrative and give the audience a dynamic way to interact with the story?

What is "group-based interactivity" and how does it fit into an interactive movie experience? How is it similar to or different from group-based interactivity found in such areas as MMOGs and iTV?

What kinds of narratives are being told in small-screen interactive movies?

HOLD THE POPCORN!

Consider these three movie scenarios:

- An astroscientist, on a return trip from Mars, is struck by a mysterious and life-threatening illness after her space ship collides with some debris in outer space.
- A turbulent love triangle erupts between a husband, his mentally ill wife, and the nurse who has been brought in to care for her.
- Cloned twins confront the drug-addicted scientist who created them.

All three stories have an intriguing premise and would seem to promise good entertainment. But if you planned on watching any of them while munching popcorn and reclining in a movie theatre seat or on your couch at home, you'd have a problem. That's because all three are works of interactive cinema, and in order to enjoy them, you would need to be an active participant. This is no place for popcorn. You'd be too busy to eat it.

As we saw in Chapter 2, interactive movies fall into one of two quite different categories. One type is designed for a large theatre screen and usually intended to be a group experience; the other type is for a small screen and meant to be enjoyed by a solo player. Of the three movie scenarios described above, the first, the outer space story, was designed for a group experience in a theatre; the second and third are small-screen movies, one for a DVD and the other for a CD-ROM. Though the kinds of interactivity and the overall experience offered by the two kinds of movies are quite dissimilar, they do share some important characteristics:

- They are story driven.
- They have dimensional characters.
- Though they may have some game-like features, narrative plays an essential role.
- Choices made by the users profoundly affect how the story is experienced.

GROUND ZERO?

Because interactive cinema is a direct descendent of the movies, one of the contemporary world's most beloved forms of entertainment, and because movies are so heavily narrative driven, one might expect that interactive cinema would be ground zero for digital storytelling. But this not the case, at least in terms of production. Relatively little work is currently being done either for large-screen or small-screen interactive cinema. However, the work that is being produced continues to break fresh ground in terms of devising new ways to combine story and interactivity.

Large-screen interactive movies can primarily be found in museums and other cultural institutions. The field is dominated by one innovative company based in Toronto. As for small-screen interactive movies, most that have been produced to date have been made under the umbrella of academic institutions or government-supported film institutes, where interactive storytellers can get the necessary support to work in this field. Thus far, the marketplace has not been particularly

receptive to this type of entertainment, making it extremely difficult for a small-screen interactive movie to succeed commercially. The interest in them is stronger in Europe than in the United States, and some of these productions are now being shown at international festivals. Some are also being sold at brick and mortar bookstores and at online sites like *Amazon.com*, indicating that a market may slowly be developing in this area.

At present, the interactive movies that are being made are geared for one of three different purposes: for pure entertainment, for training, or for education. We'll be looking at examples of all three in this chapter.

LARGE-SCREEN INTERACTIVE CINEMA

As we saw in Chapter 2, large-screen interactive movies were first attempted during the early 1990s by a company called Interfilm. These movies were commercially unsuccessful, however, and their failure to generate any enthusiasm from the public pretty much killed off interest in this area for many years. Recently, however, one company, Immersion Studios (*www.imm-studios.com*), has shown considerable faith in this type of interactivity, particularly for projects that combine entertainment and education. Based in Toronto, the company has produced large-screen interactive films for a prestigious roster of international clients. They include Harvard University, the Smithsonian Institution, and Mystic Aquarium in the United States; La Cité in Paris; the Science Museum in the UK; the Museum of Victoria in Melbourne; plus various Canadian institutions. While their films are meant to be highly entertaining, they also include significant educational content. In other words, they are works of edutainment. Many of them tackle scientific themes, including human biology, pollution, and nuclear energy.

At Immersion Studios, they term the work they do "immersive cinema," and immersion is the operative word here. Their productions combine dramatic storylines with fast-paced gaming elements, and audiences are enveloped by surround sound and images projected on a large screen. These movies use both live action and 3D animation, sometimes in the same production. The interactivity they offer to audiences is far richer and more dynamic than the old Interfilm model, and more purposeful, too. The Interfilm productions used a three-button system embedded in the armrests of the theatre seats, and audience members were give a chance to make one of three choices at various points in the movie. Otherwise, they had no role in the film. With an Immersion Studios film, however, audience members are made to feel they have an important and meaningful part to play in the outcome of drama. In one case, for example, they play time travelers and their decisions help determine what species will survive into the present day. In another case, they take on the role of marine biologists and try to prevent a die-off of sea lions.

Furthermore, the interactivity is far more versatile and extensive. Each single-person or two-person team is given a touch screen console to work with. The touch screen serves as a way for participants to indicate their choices. In addition, it offers a way for audience members to dig deeply into the subject matter, somewhat like exploring a website. During the game-like segments, it serves as a virtual control panel to direct the action. Thus, the Immersive Studio approach combines an audience-shared large-screen theatrical experience with a more personal small-screen experience and control system. (See Figure 18.1.)

Figure 18.1 Immersion Studio's approach to interactive cinema combines a large-screen and a small-screen experience. Here, the audience is watching a film called *Vital Space,* interacting with it via touch screen consoles. Image courtesy of Immersion Studios.

GROUP-BASED INTERACTIVITY

While participating in an Immersion Studios film, audience members are called upon to interact with each other, sometimes by competing and sometimes by collaborating. Some exchanges are done electronically, but at other times, people communicate the old-fashioned way—by talking with each other. At least one of the Immersion Studio projects is also networked, linking students at several different institutions. This type of shared communications, *group based interactivity,* is the hallmark of an Immersion Studios experience.

The work done by Immersion Studios bears some interesting similarities to iTV and MMOGs. All three are enjoyed simultaneously by multiple users/viewers, and all offer both solo and group-based types of interactivity. Some of Immersion Studios' new work even gives the participants the opportunity to control avatars, as they would in a MMOG. But MMOGs and interactive movies are way ahead of iTV when it comes to integrating interactivity into the core content. In an Immersive Studios production, and also in a MMOG, users can affect the narrative itself, while with iTV, the audience primarily participates via trivia questions, polls, and the seeking of additional factual information—nothing that has an impact on the story. It remains to be seen if these three areas will cross-pollinate each other in ways that will lead to advances in group-based digital storytelling.

INVOLVING THE AUDIENCE

Stacey Spiegel, the CEO of Immersion Studios, believes their movies are highly effective teaching tools, and gives three reasons for this. First of all, the immersiveness of the stories facilitates the suspension of disbelief. In traditional media, he says, "you are outside the window looking in. But here, the window disappears and you feel you are a part of what's happening." The second factor that drives learning is that the members of the audience are put in the position of needing to

make decisions, and their decisions have consequences, which causes them to be extremely alert and mindful of the material they are dealing with. And third, Spiegel feels the collaborative social element—being an active participant in a group drama—augments the learning experience. The company's philosophy of audience involvement is reflected in the old proverb that goes: "Tell me and I'll forget; show me and I may remember; involve me and I'll understand."

The company's projects incorporate three different levels of interactivity:

- Individual, which the participant does independently of the group.
- Collaborative, involving joint decisions and working on a "majority rules" basis.
- Competitive, which involves game-like action in which participants vie with one another to achieve high scores while simultaneously working toward some goal established in the film.

Spiegel reports their research shows audiences respond strongly to gameplay, and his company is thus steadily increasing the amount of gaming in their productions. In fact, they have nicknamed the type of film they make a "goovie"—a combination of game and movie. Still, narrative continues to be an important element, giving the film a context and framework and contributing to its emotional power. The participants become deeply involved with the stories, to the point of shedding tears if their actions are unsuccessful. Though each film lasts only twenty to thirty minutes, depending on the amount of interactivity, the objective is to continue the educational experience after the film concludes by motivating the audience to want to learn more. To encourage this, the films are supported by collateral resources such as posters and websites.

A SAMPLE LARGE-SCREEN EXPERIENCE

To see how an Immersion Studios movie works, let's take a closer look at one of its films, *Vital Space*. The educational goal here is to give the audience an inside look at the major human body systems. The story, briefly sketched out at the opening of this chapter, is set in outer space. As the film opens, two space scientists, a married couple, have just completed a successful mission to Mars. Commander Susan Grant is examining a vial of Martian soil while her husband, Dr. John Osborne, is busy in another part of the space ship. Suddenly, the ship is struck by space debris, causing the soil sample to spill and contaminate the chamber where she is working. Thinking quickly, Commander Grant seals herself off in the lab to prevent further contamination, but she is already experiencing symptoms of a serious health problem.

At this point, just a few minutes into the movie, the audience is about to become intimately involved in the story, and their actions will determine Commander Grant's fate. Her husband informs us that since she has quarantined herself, making it impossible for him to examine her, the only way to diagnose and treat her illness is by using an experimental, remote-controlled medical system called VIVISYS, never utilized before under field conditions. And he'll need the help of those of us in "ground control" (the audience) to guide and direct VIVISYS, which we'll do via our touch screen consoles. From this point on,

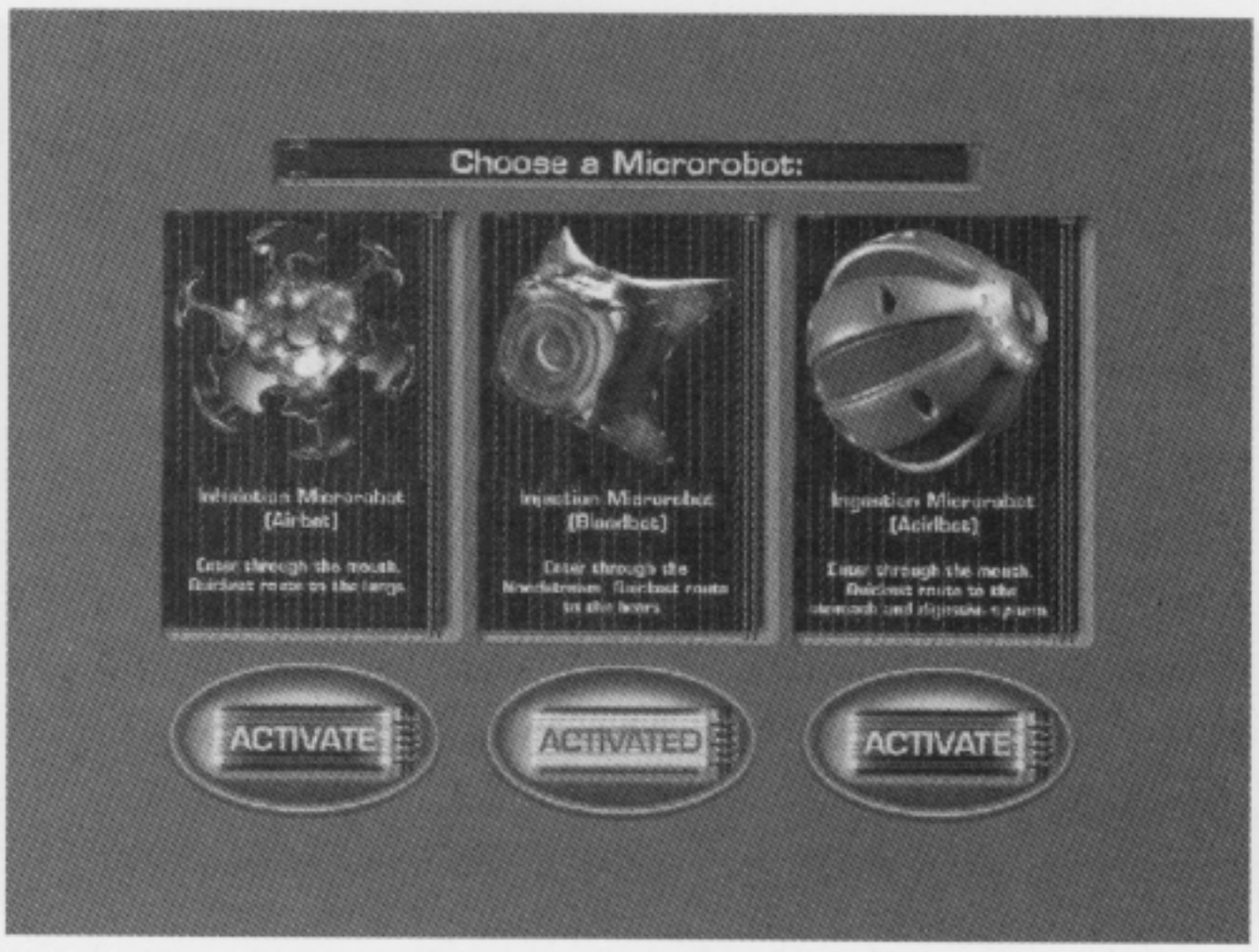

Figure 18.2 Console screen capture from *Vital Space*, showing types of microrobots. During *Vital Space*, audience members control a virtual medical system via their touch screens. Image courtesy of Immersion Studios.

we are faced with a series of decisions, such as selecting which type of microrobot should begin the diagnostic process. (See Figure 18.2.)

In a race against time, we try to determine the cause of Commander Grant's illness by investigating the various systems of her body. But her condition worsens, and in a dramatic twist, VIVISYS picks up a second heartbeat—shades of the movie *Alien*!—and is at the point of destroying it. But at the last moment, Commander Grant, writhing in pain, orders the procedure halted. It is a good thing she does, because it turns out that the second heart beat belongs to her unborn child—unbeknownst to the couple, they have a baby on the way. As the investigation into her illness proceeds, the audience may or may not find the true cause of her problem: a lethal parasitic infection. If the audience does find it, the film turns more game-like, somewhat like a first-person shooter, with audience members trying to shoot down the intruders. Thus, the life or death drama of the plot helps keep the audience engaged in the film, and the combination of the large theatre screen and the small console screens gives them the means to become deeply immersed in this unique educational journey through the human body.

SPECIAL CHALLENGES OF LARGE-SCREEN INTERACTIVE CINEMA

According to Brian Katz, the company's VP of Corporate Development, most of the films made by Immersion Studios have been for museums and other institutions, who like them because they help attract visitors. Although such large-screen installations require a great deal of special hardware and servicing, which can be expensive, they further the educational goals of these institutions. Also, because these films are suitable for all ages, they offer visitors a positive family experience. However, not all audience members are comfortable with this type of media-rich interactivity, Katz says. While young people are used to multitasking and have no problems with the large-screen/small-screen configuration, he reports that

some older people become confused and wonder "where should I look?" Often the kids fall into the role of coaching their parents, he says.

Katz also noted some of the special creative challenges posed by large-screen interactive cinema, including:

- Devising a scenario that is gripping right from the start and that thrusts the audience members into the action.
- Avoiding a presentation that is overly complicated and could turn people off.
- Creating gameplay that is exciting and complements the narrative.
- Devising interactivity that calls for meaningful choices and not just guesswork.

In addition, Spiegel mentioned another challenge they deal with: integrating the content of the large and small screens, so they become a cohesive whole. As an example of how this is done, he described a scene from a film they'd made on the space program. On the large screen, astronauts are seen outside the space station working on a robotic arm system. But when they try to return to the space station, they find the door is locked, and as they futilely try to unlock it, their oxygen begins to run out. Meanwhile, audience members are called upon to work at their console screens to find a way to unlock the door for them. Thus the action on the large and small screens is closely tied together.

Immersion Studios is leading the way in terms of what can be done with large-screen/small-screen interactivity. But they also believe that some of their techniques can be successful outside the large-screen environment, particularly ways of encouraging collaborative social interactions. They are looking at ways to migrate their work over to corporate desktop applications. They are also looking into the possibility of doing large-screen episodic projects that will encourage people to return to the same venue week after week to see the next installment, much like the old Saturday afternoon movie serials.

With Immersion Studios racking up such an impressive collection of titles, one has to wonder why other companies are not entering this field. Katz speculates that it is partly a matter of cost and the lack of business models for it. But one other entity with an unexpected interest in large-screen interactive cinema is the U.S. Army, which, as we will see in the next chapter, is experimenting with this format for immersive training simulations. Large-screen immersive cinema experiences are also offered at theme parks, but these films do not offer audiences any way to interact.

SMALL-SCREEN INTERACTIVE CINEMA

Examples of small-screen interactive movies are somewhat easier to find than their larger relatives, but they are by no means abundant, even though most people have the hardware necessary to play them. These movies are made for DVD-ROM, DVD-Video, and CD-ROM, and thus can be played on computers, stand-alone DVD players, and game consoles. So far, however, only a small niche market exists for them, primarily among people in academic circles and those with a strong interest in cutting-edge storytelling.

Interactive movies are used for both nonfiction and fictional narratives, often taking on complex subject matter and probing sophisticated psychological themes, somewhat like the films one can find in art house movie theatres. They lend themselves well to telling a story from multiple points of view, which is the approach taken in *Uncompressed*, a work briefly introduced in Chapter 4.

UNCOMPRESSED: A CASE STUDY

At the opening of *Uncompressed*, we are presented with images of six different characters or pairs of characters, including the scientist and the cloned twins mentioned at the beginning of this chapter. Other characters include a telepathic grandmother and granddaughter, a man with a life-threatening illness, and a female ghost and the man who loves her. (See Figure 18.3.) By running your cursor over the image of any of the characters, they will reveal a brief bit about themselves. By clicking on them, you will go to their storyline.

The characters' paths cross at various points in the film, and the work ends with a cataclysmic scene in which a gun is fired and someone is shot. The question of who gets shot is left for the viewer to determine; the ending can be interpreted in various ways, depending on the viewer's perception of the story. If you wish, you can follow each of the six stories from start to finish, in a linear fashion, but you can also switch to another character's perspective at various junctions.

Figure 18.3 Each of the six characters and pairs of characters in *Uncompressed* will give you a different view of the story. Image courtesy of Margi Szperling and substanz.

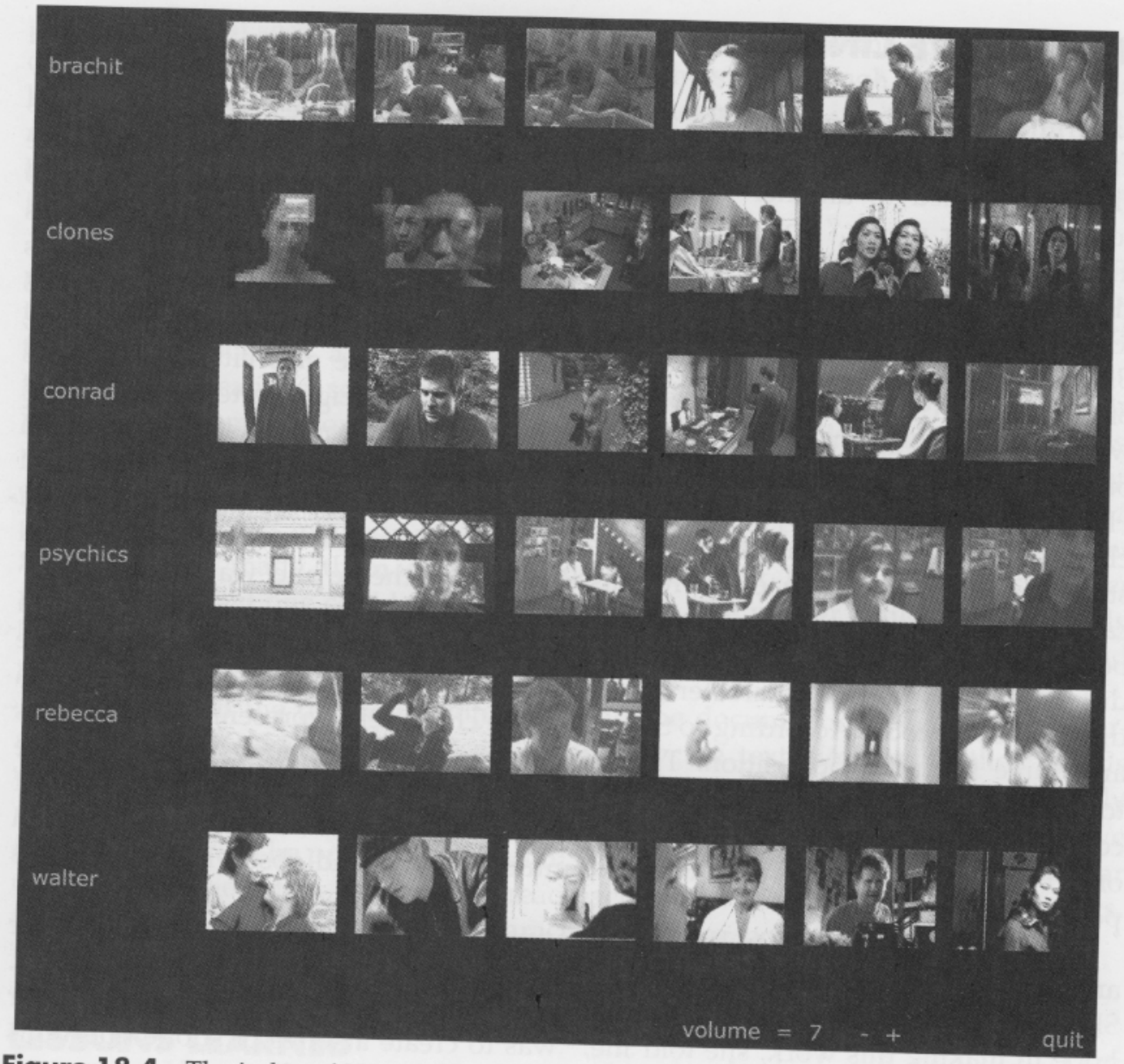

Figure 18.4 The index of *Uncompressed* offers viewers a way to switch perspectives. Image courtesy of Margi Szperling and substanz.

In addition, you can choose specific scenes to watch by going to the index. (See Figure 18.4.)

Uncompressed was created by Margi Szperling as a master's degree project while she was a graduate student at the Art Center College of Design in Pasadena, California. Before becoming interested in new media, Szperling had been an architect, and feels the disciplines have much in common, since both deal with structure, the movement through space, and design issues. She now runs a Los Angeles-based new media design and development company, substanz (*www.substanz.net*) with her partner, Craig Ashby, who executive produced *Uncompressed* with her.

Uncompressed, made in 2000, was shot on digital video on a budget of only $35,000, and was done on a twenty-day shooting schedule. It required a crew of thirty to produce, many of them students from the school's film department, and the actors donated their services for free, helping to reduce costs. The final work runs thirty-six minutes, though it takes hours to play in all its variations. Despite the low budget, it has notably high production values, and this, coupled with its innovative design and intricately crafted story, has earned it nominations in about fifty international competitions and awards in several of them.

INTERACTIVE CINEMA AS A HYPERSTORY

Szperling terms the type of film she makes a *hyperstory.* Like hypertext, it links different elements, but here, instead of linking to another page or word, the viewer is linked to another version of the story. "Story becomes secondary to concept in our pieces," she told me. "We can tell different kinds of stories in this medium, from multiple perspectives. These are databases that respond to people's choices." Some of the works that influenced her, she says, are the novels of James Joyce and Thomas Pynchon and the movies *Citizen Kane, Rashomon, Repo Man, Buffalo 66, Pulp Fiction, Time Code,* and *Run Lola Run.* She also cites the theories of the Russian experimental documentary filmmaker, Dziga Vertov (1896–1954), who expounded an idea of "film truth," holding that fragments of film, when organized, could reveal a truth not perceptible to the naked eye. Unlike the typical Hollywood movie, *Uncompressed* does not have a central protagonist. Instead, each character or set of characters serves as the fulcrum of their individual storylines. Furthermore, each represents a particular theme and way of communicating. For instance, the grandmother and granddaughter are associated with a belief in the supernatural and communicate telepathically. To accentuate the differences between the characters, each is shot in a different style and each has a different color code. According to Szperling, the characters represent six archetypes and three forms of opposition. The scientist, for instance, represents the desire to dominate nature, while the cloned twins represent the desire to break free of control. These contrasts between the characters and the ideas they represent can only be perceived by playing the movie multiple times and observing the various points of view.

Szperling believes her hyperstory approach to filmmaking offers a deeper and more complex view of the world than the typical Hollywood linear movie. She says *Uncompressed* allows the viewer to "see between the panes of glass." Her hope in making this work, she told me, "was to create a series of subtle questions meant to discredit and validate themselves within the storyline of *Uncompressed.* I realize this is a conundrum, but most provocative artwork contains opposites. Every storyline shows how different the same reality can appear; it shows perspectives as they intersect with each other. This is where the strength of the piece lies. With this vast an amount of interactive content, much is learned by traveling in between the layers."

She calls *Uncompressed* "a workout for the imagination" and recognizes that it is fairly demanding of the viewer. She says each of the stories represents a viewpoint as valid as any of the others, and that the inconsistencies make the audience question their own prejudices. She feels that the film serves as a sort of "reflecting pool" that reveals aspects of the viewers to themselves. It is the process of observation and discovery, she believes, that keeps the audience involved in the piece.

THE DEVELOPMENT AND PRODUCTION PROCESS

In working out the content for *Uncompressed,* Szperling said, she first established certain criteria for the piece to meet. She wanted all the action to happen on the same day; all the characters to already know each other or have some previous connection with each other; and all the characters to end up together in the same

place in the final scene. She also established that six would be the optimum number of characters, feeling that this size would give the story enough flexibility without being confusing, and that it was the maximum that could be introduced in thirty-six minutes of time. With these parameters in mind, she and three others on the creative team brainstormed to determine who these characters might be and what themes they could offer that could be explored in the work.

Once they'd roughed out who their characters would be, everyone on the team wrote full bios of all six, and then they collectively drew elements from these bios to finalize their personalities and backstories. Once their characters were designed, they began to build a map showing the interconnections between them and their parallel realities, something Szperling believes is important to do early on in interactive cinema, prior to the writing of the script. She feels that the connections, where viewers can shift perspectives, should be embedded in the narrative in an organic way rather than pasted onto an already existing story. For *Uncompressed*, she worked out an image-based way for viewers to switch points of view rather than one that made them use a menu—a pulsating light around a character would signal that one could switch perspectives. The viewer could do this merely by clicking on the character with the pulsating light, an extremely intuitive and noncumbersome form of navigation.

Despite all the preproduction work and the documents the team had generated, Szperling said, they could not foresee by the text alone what their words would set in motion. During production, she found that the script constantly needed to be updated to meet the needs of the interface as well as the narrative flow of the work. The project was continually evolving. Production was a particular challenge for the actors, who had to read each line as many as five different ways, to portray the scene from various characters' vantage points.

LESSONS LEARNED

Looking back now on the making of *Uncompressed*, Szperling feels that if she were to do it again, she would try to simplify the process as much as possible. For example, instead of shooting each character in a unique style, she would shoot them in blue screen and add the stylistic elements during postproduction. She also feels the story might have been simpler, because certain aspects of the plot seemed to be difficult for some viewers to understand. Yet she believes this genre, the hyperstory, has great potential. She looks at *Uncompressed* as a prototype of what is possible. She believes this form can be used to tell many different kinds of stories, and can give us "a way to understand who we are and to understand the complexities of the world around us."

THE HYPERSTORY AS A VEHICLE FOR TRAINING

As at least one major corporation has discovered, the hyperstory can be a potent vehicle for training. The Boeing Leadership Center turned to Szperling's company to create and produce a CD-ROM-based hyperstory as a training tool to assist the company's employees who were making the transition from individual contributors to management-level positions. At Boeing, this amounts to about 1,400 employees

a year, and many of them find the promotion unexpectedly difficult. Boeing was attracted to the hyperstory idea because they felt it would help new managers deal with tough issues that had no black and white answers, particularly in matters involving communication. They also felt using a multiperspective story would stimulate dialogue, engage the trainees, and establish a nonthreatening learning environment.

To develop the film, *Transition to Management*, substanz worked closely with Boeing's instructional designers. They came up with a story set at a fictional magazine publishing company where an employee, Chloe, has just received a promotion to manager. Though under the impression that she's doing just fine in her new position, Chloe is actually causing potentially serious friction between herself and other staff members. As with *Uncompressed*, viewers get a chance to see things not only from Chloe's perspective but also from the perspective of other characters, two fellow employees at the publishing company. This technique gives Boeing's new managers a vivid insight into the mistakes Chloe is making—and hopefully helps them avoid making the same mistakes themselves.

While *Uncompressed* had six characters or pairs of characters and takes an ensemble approach, this film has one central protagonist and two supporting characters. Szperling said Boeing felt this approach to characters would work best in terms of conveying the training message. The work was further customized to Boeing's needs by having less subtle interaction points than in *Uncompressed*, and including additional voice-overs, reflections, and possible endings. "I believe that each project should have a specific approach to the story structure that fits the needs of the narrative," Szperling told me.

Transition to Management, completed in 2002, will be used for ten years at Boeing, and has already had an impact on the corporate culture there. When new managers slip up, they are given to say: "I pulled a Chloe." And the project has received recognition from the outside world as well, earning a Gold Plaque in Interactive Multimedia at the 2002 Chicago Film Festival.

OTHER APPROACHES TO SMALL-SCREEN INTERACTIVE CINEMA

Another company making small-screen interactive movies, Aftermath Media (*www.aftermathmedia.com*), has taken yet another approach to this form of digital storytelling. The cofounders of the company, Rob Landeros and David Wheeler, have impeccable credits in interactive media; they were two of the major creative forces behind the landmark games *The 7th Guest* and *The 11th Hour*. In their two interactive movie projects, however, they were determined to forego any gaming elements and find other ways to harness interactivity. Let's take a brief look at the two works they created.

Tender Loving Care, briefly described at the opening of this chapter, is a psychological thriller adapted from Andrew Neiderman's novel of the same name. It is the story of a woman who suffers a mental breakdown and becomes delusional after her daughter is killed in a car accident. Her husband seeks the help of a psychologist, played by actor John Hurt, who suggests that he hire a live-in psychiatric nurse to take care of her, which he does. However, the husband finds himself powerfully attracted to the mysterious nurse he employs, and the situation provokes more havoc within the household. The resulting conflicts form the core of

the movie. The twist here, in terms of the interactivity, is that the viewers themselves become integrated into the psychological drama. At various points in the story, the psychologist asks the viewers probing questions, and their responses are compiled into a psychological profile that helps shape what the characters do and how the plot unfolds. Viewers can even peek into their personal profiles. In addition, they can snoop around the couple's house to try to uncover secrets the characters are hiding. *Tender Loving Care* was shot on 35mm film and released on DVD-ROM and a DVD-Video as well as a theatrical motion picture. It has received awards both in North America and in Europe.

The second interactive film made by Aftermath Media, *Point of View*, employs a similar model of interactivity. The story revolves around a reclusive artist named Jane who is trying to escape from a nightmarish event in her past. The story is broken into twelve chapters, and at the end of each, viewers are asked questions which are used to build individual personality profiles, which then shape the behavior of the characters and the direction of the narrative. As with *Tender Loving Care*, viewers can also explore the locations where the story takes place. Although designed as a single-user experience, the film was shown to an audience of about 250 in Vancouver, projected onto a large screen. A master of ceremonies polled the audience for their responses, enabling them to jointly direct the interactivity. According to Landeros and Wheeler, the crowd got quite involved in the process and many stayed for the full 3 1/2 hours it took to reach the ending. This screening demonstrated that in certain circumstances, at least, a small-screen interactive movie can be effective in a theatrical setting.

Despite the positive reception Aftermath has gotten from these two projects, it is no longer making interactive movies. According to Rob Landeros, competition from major movie releases and the small market niche for this type of entertainment did not make it viable for them to continue. But, he said, they did find interactivity in movies to be well-worth exploring from a creative standpoint.

NONFICTION INTERACTIVE MOVIES

Works of nonfiction as well as fiction are being produced as small-screen interactive narratives. Documentaries, compiled as they are from a great mass of material, are particularly well suited to an interactive narrative treatment. In linear documentaries, the production team selects which materials to show the viewer and which to exclude; it arranges the order in which the materials will be seen; and it selects or writes the words for the voice-over narration. But in a nonlinear documentary, particularly on a DVD, a great amount of the raw material can be included. The viewers themselves can be given the opportunity of choosing what material to see and in what order. They might also get to choose among several different audio tracks. In Chapter 20, we will be discussing two projects that use nonfiction subject matter. One, *Manuela's Children*, is an interactive documentary. The other, *Bleeding Through: Layers of Los Angeles*, is an innovative blending of nonfiction with fiction.

Bleeding Through: Layers of Los Angeles was a coproduction of the ZKM Center for Art and Media in Karlsruhe, Germany, and the Labyrinth Project at USC's Annenberg Center for Communications. The Labyrinth Project, which is under the direction of cultural theorist Marsha Kinder, has produced a number of

interactive narratives that explore, as Kinder terms it, "the border between documentary and fiction." Kinder serves as executive producer of the works undertaken by this initiative. She calls these works *database narratives*. According to the Labyrinth Project's website (*www.annenberg.edu/labyrinth*), database narratives are those whose structure allows for both the selection and the combining of narrative elements from a number of categories. The site further explains: "Although a database narrative may have no clear-cut beginning, no narrative closure, no three-act structure, and no coherent chain of causality, it still presents a narrative field full of story elements that are capable of arousing a user's curiosity and desire."

The Labyrinth Project has undertaken a variety of disparate projects, many of them based on the works of artists and writers. The project's website says of the database narratives that they "frequently have a subversive edge. For, in calling attention to the database infrastructure of all narratives, they reveal a fuller range of alternatives. In this way, they expose the arbitrariness of so-called master narratives, which are frequently designed to appear natural or inevitable." Although the Labyrinth Project is probing the borders between fiction and nonfiction, it would be interesting to see what this approach could do with a narrative that was entirely story-based. Could a fictional story stand up to this approach, or would it fall apart without a three-act structure, a beginning or ending, and with no coherent sense of cause and effect? These are among the many fascinating questions that have yet to be answered in this arena.

CONCLUSION

As we have seen in this chapter, the field of interactive cinema may be small, but the work that is being produced here is dynamic and innovative. It encompasses both large-screen theatrical experiences and intimate small-screen interactivity, sometimes within the same work. The practitioners of interactive cinema employ many approaches for the works they create, as reflected in the variety of terms they use to refer to them: goovies, database narrative, hyperstory, and immersive cinema.

Each new venture in interactive cinema, whether for pure entertainment, for education, or for training, pushes the envelope of digital storytelling a little bit further. It is a field that cries out for more study and more experimentation. Advances, however, have been slowed by the dearth of successful business models. Even more daunting, however, has been the lack thus far of a receptive audience for this type of storytelling. Some critics have argued that interactive cinema has not caught on because it is simply not a viable form of entertainment, and that cinematic storytelling and interactivity cannot be melded together in a satisfactory way.

However, it must be remembered that in the early days of linear cinema, it too met with a negative reception. Audiences reacted to the first movies they saw with bewilderment and hardly knew what to make of them. With time and increased familiarity, however, they came to accept and understand the grammar of this new medium—techniques like the montage, the dissolve, and the flashback. In fact, if we look at the history of each new art form, we will usually find that the public reacts with skepticism and an initial lack of enthusiasm. Not so long ago, when music videos were first aired on TV, they too had a chilly reception,

especially from adults who had grown up watching the more stately paced movies of the mid-twentieth century. Many found music videos to be a dizzying barrage of unconnected images and could find nothing to enjoy about them. Although some people will never like them, they have become an immensely popular and influential part of contemporary culture.

As for interactive cinema, it is critically important that it, too, develop a support base of users. Otherwise, its creators are laboring in a vacuum. Josephine Anstey, who created the VR work *A Thing Growing* (described in Chapter 19), stated this dilemma eloquently when she said: "We need practitioners and experimentalists, but we also need an increasingly sophisticated audience and the feedback between the two. No interactive fiction can be made without constant testing and feedback from users." (*Computer Graphics World*, February, 2001.)

Hopefully, as more people are exposed to interactive cinema, they will begin to develop an understanding and appreciation of a new cinematic language and a new storytelling art form, and this promising arena will receive the support it needs to move forward.

IDEA-GENERATING EXERCISES

1. Pick an educational or training topic that you think might work well as an interactive movie. Do you think this topic would be better suited to a large-screen experience or a small-screen experience, and why? Work out a premise for this topic. What would the story be? How would the audience interact with it and what would they learn?
2. Sketch out a premise for a fiction-based or documentary movie, one intended as pure entertainment. Do you think this work would be better suited to a large- or small-screen experience, and why? What kinds of interactivity would this premise offer, and how would the player's involvement affect the ultimate outcome?
3. If one of your ideas for an interactive movie involves a large-screen and small-screen configuration, as with the Immersive Studios model, work out one sample idea that offers group-based interactivity. What would be happening on the large screen, and what would participants be doing on the small screen?