Grahame Weinbren

Another Dip into the Ocean of Streams of Story

"He looked into the water and saw that it was made up of a thousand thousand thousand and one different currents, each one a different color, weaving in and out of one another like a liquid tapestry of breathtaking complexity; and Iff explained that these were the Streams of Story, that each colored strand represented and contained a single tale. Different parts of the Ocean contained different sorts of stories, and as all the stories that had ever been told and many that were still in the process of being invented could be found here, the Ocean of the Streams of Story was in fact the biggest library in the universe. And because the stories were held here in fluid form, they retained the ability to change, to become new versions of themselves, to join up with other stories and so become yet other stories; so that unlike a library of books, the Ocean of the Streams of Story was much more than a storeroom of yarns. It was not dead but alive."

It is easy to read the nostalgic tone of Rushdie's 1990 "children's story" as the wish for a return to innocence, to a state of story-telling purity beyond the reaches of politics and intrigue. At the time he wrote *Haroun and the Sea of Stories* purportedly for his eleven-year-old son, Rushdie was, of course, too sophisticated – and too embittered by the outrageous circumstances of his life – to profess any kind of innocence or naivete. The novella abounds with metaphors of cruel suppression and mindless censorship. The nostalgia embedded in the *Sea of Stories* is better seen as a reminder of the creative process a writer (or filmmaker) craves in his or her darker moments: an ocean of stories, wide and deep, effortlessly tapped. The power of the image is in its erasure of the line between writer and reader – Haroun's father, a professional storyteller, need only drink from his personal faucet plumbed to the Ocean and report to his audience: this alone constitutes writing.

Can the image be turned around? Can we imagine the Ocean as a source primarily for readers rather than writers? Could there be a "story space" (to use Michael Joyce's resonant expression) like the Ocean in which a reader might take a dip, encountering stories and story-segments as he or she flipped and dived? In these waters, turbulences created by the swimmer's own motion might cause an intermingling of the Streams of Story. The Ocean, as I imagine it, is a dynamic narrative region, a Heraclitean river into which one can never step twice, a lake of Heisenbergian uncertainty where the very attempt to examine a particular story-stream transforms it. What a goal to create such an Ocean! And how perfect as an ideal for an interactive fiction!

Fiction, Cinema and Cybernetics

The *idea* of interactive fiction is not new. But the notion of a time-based medium that is *not* interactive is no older than mechanical recording. Before the recording of sound, all music was "interactive," though in this context the term sounds silly. Musicians are always affected by external factors, from the other performers in the ensemble, to the "feeling" of the audience, to the acoustics of the hall, et cetera. The same can be said for theater. The risk of variability is an essential ingredient of the thrill of "live" performance. And before recording, obviously, all performance was live. Though it is true that few works were deliberately designed to be influenced by external factors (consider Tinker Bell in *Peter Pan*), audiences were always aware of their potential power. One of the aspirations of an interactive cinema is to return the medium to an earlier state, where the fact that the audience can affect the performance is given.

In attempting to develop an interactive narrative cinema, I realized early that it will not have the shape of narrative as we have come to understand it since cinema and television – media of the "moving image" have come to dominate our notions of representation. The very idea of user impact opens to question the concepts of end and beginning, of crisis and

conflict, of development itself. The traditional (Aristotelian) notion of narrative must be rethought.

My own work is in the pull of a pair of forces that defined the late twentieth century – the Cinema and Cybernetics, the Projector and the Computer. In 1995, when this essay was first published, I had made two installations incorporating computers and moving images. Now (in 2002) there are five. In all these works the participant's (inter-)actions affect the temporal conglomerate of images and sounds. The computer itself is not considered a medium or a tool, but a device that controls and presents existent media. Thus the questions that arise are about how cinema changes when its apparatus is linked to a computer – just as one can investigate changes in the structure of cinematic communication when recorded sound is added to the moving image.

The first two questions that came up can be posed in quite traditional terms. What kind of story will fit the medium, and what will be the grammar of its telling? Crudely: where is the change – in content or structure? One entry point is to find a narrative for which the sequence of events is not salient, since if the viewer is to wander around and through the story, the order in which the depicted events are accessed should open to variation. And this requirement led me directly to Freud's studies of dream interpretation.

A Branching Structure

"I dreamed that it was night and I was lying in my bed. Suddenly the window opened of its own accord, and I was terrified to see that some white wolves were sitting on the big walnut tree in front of the window. There were six or seven of them. The wolves were quite white, and looked more like foxes or sheep dogs, for they had big tails like foxes and they had their ears pricked like dogs when they pay attention to something. In great terror, evidently of being eaten up by the wolves, I screamed and woke up." [3]

Freud transcribed and published the case history of the Wolf Man in 1914–1915, soon after the end of the

patient's analysis. It is the apex of Freud's early period, where the central concepts of condensation, displacement, wish fulfillment, the primal scene, and so forth reach their full fruition, never to be resolved in quite the same way.

The analysis revolves around the dream image of the staring wolves, introduced early on by the patient. Freud describes the process of gradually uncovering the components of the dream, linking each element with an event, a character, or an emotion remembered but perhaps suppressed. The dream's significance for the dreamer, manifested in the overwhelming emotional effect it had on him and the fact that it remained in his memory for decades, led Freud to seek further explanation. He finally accounts for this power in his proposal that the dream encapsulates the dreamer's greatest fears and desires, as transformed memories of the events that first produced them. For my purposes the details (and – it goes without saying – the "truth") of the dream-analysis are not important. I wish only to appropriate certain aspects of Freud's methodology in my own search for a paradigmatic story structure suitable for an interactive cinema.

Condensation is the key concept. The dream is formed by compressing and combining a set of mental objects. The dream can function in the dreamer's mental framework as the distillation of a set of emotional charges. The dream's powerful affect comes from the fact that, in an important sense, it embodies a set of memories and the specific emotions linked with them. Repeatedly Freud stresses that there is no universal symbol translation table – every element of the dream image, and every property of every element, is understood by the dreamer in his own individual way. Each element substantiates a combination of particular fears, hopes, desires or beliefs, transformed, by the laws of the unconscious, into a component of the dream image. Seeing the images through the dreamer's eyes – identifying the underlying atomic parts and understanding how they are altered by the dreamer's mental process into the dream image – is understanding the dream. In this understanding is

3 Sigmund Freud, "From the History of an Infantile Neurosis," in *The Wolf Man* by *The Wolf Man*, Muriel M. Gardiner (ed.), Basic Books, New York, 1971, p. 173

written a page of the biography of the dreamer (or, more likely, several chapters of his biography).

Freud's notion of a dream is a conception of a narrative-type based on a hermeneutic method. Unraveling a dream reveals the narrative of the dreamer's interlocking emotional states. But it is not a narrative that unfolds in time – all its elements are simultaneously present. Freud goes to great trouble to convey this atemporality, but even for him it is a notion that eludes expression. After all, his own mode of communication – writing – is, of necessity, linear, one word following another, forming paragraphs that follow one another, and so forth, while his conception of the dreamwork is, by its very nature, non-linear, unsuited to the writing forms of the early twentieth century.

"This task [of forming a synthesis from fragments that emerge in the analysis of a patient] ... finds a natural limit when it is a question of forcing a structure which is itself in many dimensions onto the two-dimensional descriptive plane. I must therefore content myself with bringing forward fragmentary portions, which the reader can then put together into a living whole."[4]

Considered as a narrative structure, the underlying elements of the dream can be revealed in any order whatsoever, and the same story will emerge. Thus, it is truly a narrative without specificity of sequence.

The Interpretation of Dreams

A film might try to approximate the structure of Freudian dream analysis in a story structure that step-by-step unraveled the components of an evocative image. However, the linearity of cinema sequence tends to freeze material into narrative hierarchies, one element gaining in significance while another loses, depending on each one's context and their overall order. How better to reproduce the minimal significance of sequence, the irrelevance of order, than through interactivity? For in an interactive work the sequence of events can be determined by the viewer. And by the time the viewer becomes aware that sequence is determined by his or her responses alone, sequence may already have stopped being a criterion of narrative significance. In normal cinematic circumstances, the weight of an event is given largely by its context: now, with sequence under the control of the viewer, this weight can lighten or even dissolve. And in these circumstances the viewer's understanding of the events of the narrative can undergo a radical transformation, based entirely on the knowledge that things could have been different. Later in this paper I shall make an attempt at describing the "subjunctive" state of mind evoked by the interactive cinema.

The elements associated with a particular dream-image are not by themselves sufficient to define the biographical narrative underlying the dream. This would be a gross oversimplification. Of course it is also essential to incorporate how the elements are transformed and combined into the dream. Often this syntax and its application can be expressed only verbally. It is difficult, for example, to imagine an effective visual expression of the transformation of

something into its opposite (from "staring" to "being stared at," or from the ornate motions of sexual intercourse to the stillness of the white wolves), or the transfer of a particular quality from one object to another (as the color white is lifted from sheep and flour and attributed to the wolves). Freud's interpretation of the dream is far more than a simple compacting of memory-images into one conglomerate: the grammar of the image-elements' metamorphoses and rearrangements is as significant as the elements themselves.

I am not suggesting that the principles of condensation and displacement could not form a foundation of a visual narrative, but only that some depiction of the types of transformation will have to be incorporated alongside the results of the transformations. The point, to reiterate, is to develop a type of narrative that can retain its identity and make sense independent of the sequence of events. Thus, in *Sonata*, I found that I needed to make the formative elements of the dream into components of the dream-narrative – without them it became a mere medley of scenes connected only by association.

Desire

Cinema, of course, cannot be internally affected by its viewers. Turning one's head, far from affecting the visual experience, removes one from its world and into the mundane space of the screening room. The chess pieces and donkeys on screen will only yield to forces that are profilmic, within the diegesis, or (commonly) both.

Furthermore, the impossibility of impacting on the cinematic is one of the sources of our pleasure in it. "Don't go up(/down) the stairs!" we inwardly cry out while watching Hitchcock's *Psycho*, first to the private detective Arbogast, and later to the heroine Lila Crane, all the time knowing that however deeply felt, our distress will not influence their behavior. The experience of suspense would be fatally distorted by the elimination of inevitability in the characters' actions. If Lila could turn back because of our pleas, the entire effect of the horror film would dissolve. Much of cinema's power over us is our lack of power over it. In this sense, suspense is a paradigm of cinematic response. It could be argued that the introduction of viewer impact on the representation is a destructive step for the cinema. The removal of the possibility of suspense is the removal of desire from the cinematic, and, ultimately, the removal of the very fascination of the medium.

To find interactive forms in which desire can be sustained will require the construction of a new cinematic grammar. And, to be successful, this search, this construction-process, must foreground the temporal aspect of cinematic communication.
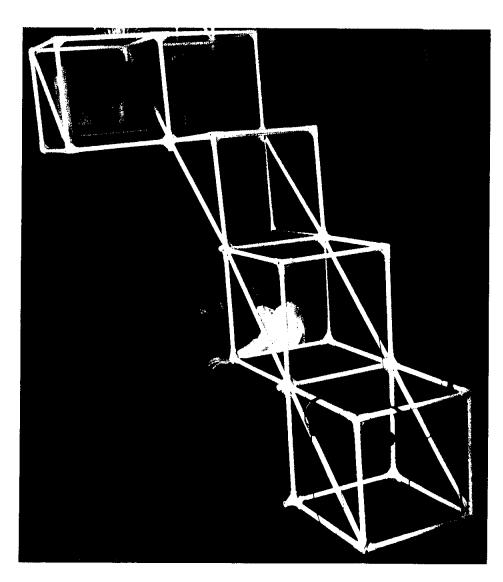
Time. Time. Time.

Time always moves relentlessly, tautologically, forward, as long as one is alive. "Real," clock-measurable duration can always be distinguished from time subjectively felt. The duration of cinema is rigidly defined by the apparatus, fully predetermined by the physical substrate of images projected serially at a regular pace set by an electric motor. A film begins and ends

4 Sigmund Freud, op cit., p 173

Grahame Weinbren,
Roberta Friedman
The Erl King
1983–1985
production still
collection of the artists
© Roberta Friedman and
Grahame Weinbren

Elizabeth Arnold, soprano,
sings Schubert's adaptation
of Goethe's "Erlkonig."

Grahame Weinbren,
Roberta Friedman
The Erl King
1983–1985
production still
collection of the artists
© Roberta Friedman and
Grahame Weinbren

"Father, don't you see I'm
burning?" Ken Glickfeld and
Cameron Johann as father and
son in Freud's "Burning Child"
dream.

Grahame Weinbren,
Roberta Friedman
The Erl King
1983–1985
interactive cinema installation
computer-controlled laser-
videodisc array, touchscreen
interface, custom hardware and
software, video and audio
material, 600 stills
dimensions and duration
variable
installation view:
Whitney Biennial, New York, 1987
collection of the artists
© Roberta Friedman and
Grahame Weinbren
photo © Grahame Weinbren

Sonata
1991/1993
video frame grab
collection of the artist
© Grahame Weinbren

Ken Taylor as Podnyshev from
Tolstoy's *The Kreutzer Sonata*

Sonata
1991/1993
video frame grab
collection of the artist
© Grahame Weinbren

Nicole Farmer as the
apocryphal Judith with wolf

Sonata
1991/1993
interactive cinema installation
computer-controlled laser
videodisc array,
suspended-frames interface,
custom designed hardware and
software
dimensions and duration variable
installation view: International
Center of Photography,
New York, 1993–1994
collection of the artist
© Grahame Weinbren
photo © Grahame Weinbren

necessarily and predictably. Relative to the beginning, the end is dependent on, and only on, the length of the filmstrip. Whatever its images, however they are organized, a film has a physical beginning, middle, and end. Whether and how this linear temporality structures the image-material in a particular film is a major issue (perhaps the major issue) for a filmmaker. It could even be argued that the stance taken by a filmmaker towards temporal structure, how time is articulated in a particular film, is an index of where in the spectrum of cinematic practice (from Hollywood to Avant Garde) a given work falls.

This gives us the first sense of cinematic time, Duration or Running Time: the clock-time required for the filmstrip to run through the projection apparatus.

The second sense of time is that of the world depicted in the film – and here the limits are more or less the cinema of story-telling, and its Diegetic Time.

Mieke Bal, in *Narratology*, calls this the time of the fabula or fictional world imagined by the story. A cinema narrative may jump forward, eliminating decades (or centuries) in a single cut; or slide back, perhaps using one of the various narrative strategies that fall under the category of flashback; or remain in the present, so that a given passage of film denotes a continuous passage of time. This latter case (the most frequently used) still allows for a broad range of variation: one continuous two minute portion of a story can occupy five minutes of screen time, while the next portion compresses seven years into as many seconds.

Meanwhile...
Experienced Time. Detective Arbogast's walk up the stairs seems painfully extended, so that his stabbing at the first landing is a dreadful shock. This shock puts us on edge for Lila's later descent into the base

ment, which stretches time even further as each step seems to last a full minute, since we now (rightly) expect the worst to be waiting for her. On one other end of the scale, a contemporary action film can make us feel as if no time passes during its hundred minutes; while in another discourse entirely, a film like *Wavelength* (Michael Snow, 1968) insists on equating duration and depicted time, a position transformed into an ideology in the 1970s by such "structural/materialist" filmmakers as Peter Gidal. The relationship of film grammar, plot, and the experience of time is a fertile area of study, especially since the compression of time is probably one of the major determinants of cinema's phenomenal success.

The question is: what happens to cinematic time when viewer input becomes a component of the screen amalgam? To what extent does the incorporation of viewer impact keep time real, canceling out the magnetism of cinema itself – when does it cease to be cinema and become "multimedia" in its drab information-delivery costume, the slick transmission of data in fields of "hot spots," "buttons," and "point-and-click menus"? Now (2002) this wasteland has become transmogrified into the paralytic gloom of the World Wide Web, and most people associate interactivity with clicking though endless linked Oracle database items.

The Kuleshov Effect
The temporal grammar of classical film continuity can be summed up in a single example, which, like much mythology of cinema, is described more often than seen. The "Kuleshov Effect" scenario consists of a close-up of a Russian actor, intercut with several emotion-laden images (a dead woman in a coffin, a child playing, a bowl of soup). This supposedly produces in the audience a sense of the actor's face as saturated with appropriate emotion. But more interesting than this (presumably a commentary on the actor's ambiguous, doleful expression) is the idea, taken as "obvious and certain" by Pudovkin, that the character is seen to be "looking at the soup" – the man and the soup are linked, across the cut, into a single continuous space. Of course it cannot be as simple as this, as the sense of continuous space requires the support of a number of factors such as eye-line, lighting, shadow direction, et cetera – but the point is clear. I'll suggest a recasting of this fable later in this paper. Here I introduce it only to restate the familiar homily that in cinema spatial unification is easily maintained through temporal disruptions, given a particular sequence. Sequence determines space. And sequence logically requires time.

The Liberation of the Filmstrip
A standard linear unit of cinema has an A-B-A structure: e.g., the Kuleshov point-of-view cutaway, the shot-reverse-shot of a dialogue scene, or the performer-audience-performer of the Musical. This atomic structure defines continuity of time and space in the cinema.

The equivalent in my interactive cinema is formed by a sequence in which the middle term is produced by an action of the viewer. If the viewer does not act, the first shot continues. But on action by the spectator the B-shot appears, then, after an appropriate

period, the A-shot reappears, perhaps transformed by the interspersed shot, perhaps unchanged. In *Sonata* this structure is used as a bridge to an alternative point of view (for example of another fictional character, or of the author); as a jump to an earlier (or later) time in the story; as a glance at a different depiction of the narrative situation (for example, a classical painting of the Judith and Holofernes theme rather than its continuing narration by a storyteller); or as the momentary introduction of a parallel narrative line. Does the sequence still denote a continuity of space and/or time? The interpretive mode the viewer takes toward the new material is associative. Because the new image or scene was produced, i.e. brought on screen, by the viewer, he is forced into connecting to the image it replaces – an act of association, rather than spatio-temporal suturing. In *Sonata* this act is reinforced by two strategies:

1. the automatic return to the previous image, so that it seems that the image produced by the viewer interaction is a temporary interruption of a continuing logic;

2. audio continuity: the sound from the first image continues through the interruption, which reinforces the impression that the viewer's actions are disturbing the natural flow, thus demanding that a sense be made of the new complex.

In the environment created by this structure, *Duration* becomes variable, not fixed. Though the plot of the unfolding narrative is not affected by the viewer's interactions, the screen can now contain multiple diegetic times simultaneously, and the viewer quickly becomes accustomed to navigating between them.

Experienced Time, on the other hand, becomes open and indeterminate. At one extreme the viewer can find himself in the extended time-instant of the computer hacker or video-game player compulsively acting on the screen image. It is this semi-hypnotic state that allows the computer programmer to spend twenty-four hours at a stretch in front of a CRT, "jacked in" as the novelist William Gibson puts it. In his fiction Gibson often compares the state to that produced by imagined mind-altering drugs of the future. In this mental condition, the user's impact on the screen output is paramount, while awareness of content and interpretive distance are subordinated to action. Video-game environments are often designed to stimulate this condition – the content is minimal and ancillary to the actions of the user, which are immediate and powerful, either floridly destructive, requiring hand-eye coordination, or effortlessly navigational, and most often a combination of the two. Unlike a video game, however, changes in interactive cinema are driven by plot and consequence, and consequently compulsion will not be the overriding ingredient of the mental state of the viewer. Here the need for evaluation, interpretation and understanding are in the foreground, though the obsessive need to fully explore the narrative space can serve well as an incentive and accompaniment.

Freed from the predicament where the apparatus alone dictates the temporal experience, time can now expand or contract based on the extent of the viewer's involvement or attention, no longer only because of the hills, gullies, and plateaus, the changes in

elevation of the plot. One can imagine the user of an interactive cinema alternating between compulsive input, loss of self in the flow of the narrative, and a sense of distance and control of his own experience of time, as the tides of the story ebb and flow based on his own actions on and in it.

The notion of suspense, for example, can be retained but transformed. If the viewer identifies with a character, seeing him as transfixed with horror at one moment, overcome with relief at the next, there may be some hesitation about accessing the cause of his distress. Now a new emotional affect, begins to emerge. "Don't look behind the door!" we wordlessly warn – but now whether the character opens the cellar door is determined by us, and the vacillation, the hesitation, related to a particular experience of suspense, will put the viewer, unexpectedly, in a different grip of the screen. The new pull is a hook of agency – whether we have to face the horror that we fear and are fascinated by is now our decision, and in an effective work we will be equally compelled in both directions.

Then What Can the Interactive Cinema Depict?

"A person's life consists of a collection of events, the last of which could also change the meaning of the whole, not because it counts more than the previous ones but because once they are included in a life, events are arranged in an order that is not chronological but, rather, corresponds to an inner architecture."[5]

Our worlds are disorderly and disorganized, unrestricted and loose. Strands of perception and inner experience are interwoven with actions that impact on our immediate environment, causing change in our perceptions and generating new experiences. Time advances relentlessly while our consciousness staggers in and out of it, memories of the past intermingling with hopes for the future as we react to events of the present. Lived experience does not parcel itself into linear, closed structures, though we sometimes represent things that way in order to tell stories about ourselves. But autobiographies, like all narratives based on fact, are always at most distortions and at least abbreviations, omitting many events while inflating others. A complete recounting of the most minor experience (including the mental activity that accompanied it) would last much longer than the experience itself. We compress, excerpt, exclude, and reorganize when we tell stories about ourselves; we must dramatize and deform the facts to fit them into a plotted "story-line" with an ending that provides satisfactory closure. If the interactive cinema is a more faithful rendering of reality, it is precisely because it can bypass some of these criteria of narrative structure. Intermixing and interweaving multiple narrative streams, it can create a meta-narrative sum that is greater than its component parts, if the subject- matter is a match for the potential of the medium. What would be an appropriate model for the subject matter? The ideal is the human mind in operation.

We are multi-tasking units. We can whistle and daydream while working, fantasize while having sex, speak the English translation while listening to the German, and so on. And we can switch from one mental activity – one state, one condition – to another, instantly and without effort. It is easy and natural for most people to keep many thoughts and perceptions simultaneously active in their minds, transferring from one to the next at will. One's current inner experience is a conglomeration of perceptions of the present, memories of the past, hopes for and guesses about the future, along with beliefs and fears independent of time markers, dreams, imaginings, pains, etc. Each mental element forms an undercurrent in what is happily called the "stream of consciousness," and navigating these waters is part of what it is to be human. Rushdie's Ocean can be heard in these shells

How do we move from one mental entity to the next? One thing is certain: it is nothing like making a selection from a list. The "menu" model incorporated in contemporary computer software is aptly named – using it is like negotiating a meal at a fast food restaurant. Switching between streams of mental activity involves responding to hardly perceptible internal and external cues, much as one rides a bicycle around obstacles, keeping balance by slight shifts in position, changing direction by combining such shifts with handlebar adjustments and greater weight adjustments. Except in the least significant cases, we affect things in our lives not by making choices, but by actively responding to situations, with speech acts or in behavior, and equally by silence or inaction. Only in restaurants or department stores are we faced with a closed list of alternatives. The interface of an interactive cinema cannot restrict itself to a model of choice, though this does not mean that choice is entirely banned. Response is the operative concept.
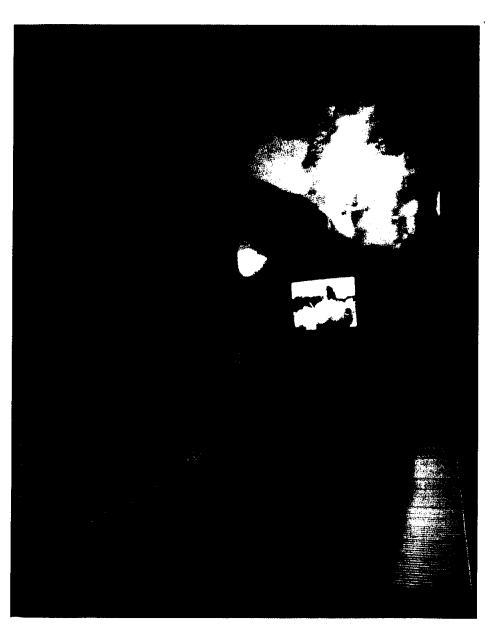
Open Issues: What Isn't the Interactive Cinema?

Summarizing the story so far: the interactive narrative will be in the form of a story space (again the terminology of Michael Joyce and Jay Bolter) laid out for exploration. This story space may consist of a number of related narratives that the viewer forges or discovers links between, or of a single narrative seen from various viewpoints (for example, of different characters). It may be the breakdown of a particular situation or image or scene into its (non-hierarchical) historical or constitutive elements.

But it will not be a linear story where viewer input determines what-happens-next. Such a structure does not contribute to the notion of interactive form since everything that appears will remain within the limitations of the linear – the fact that he has selected which line the story takes is irrelevant. This particular structure becomes interesting only when the viewer is exposed to different hypothetical situations, so that he can see what would happen if the characters took this turn, that path. Only in this case might the overall experience of the piece retain the quality of a story space of multiple narratives simultaneously present for exploration.

Italo Calvino, *Mr Palomar*, tr. William Weaver, Harcourt Brace Jovanovich, New York, 1983/1985, p 124

Grahame Weinbren,
James Cathcart
March
1995/1997

Evert Eden as the Angel
on route to prevent the
Sacrifice of Isaac

Grahame Weinbren,
James Cathcart
March
1995/1997
two-channel architectural
interactive cinema installation
computer-controlled laser-
videodisc array, interactive
computer-graphic projection,
walking ramp interface, custom
hardware and software
dimensions and duration variable
installation view: Anchorage,
Brooklyn, New York, 1997
collection of the artist
© Grahame Weinbren
photo © Grahame Weinbren

To put this point more generally, registering response alone will not satisfy the basic requirement that the interactive cinema incorporate (reflect, arouse, respond to) the interest or desire of the spectator.

The bottom line of the interactive cinema is that the viewer has some control over what is on-screen. He or she knows that what is there will change if she or he acts, that it would have been different if he or she had acted differently earlier. Thus, the viewer is aware of a fundamental indeterminacy. I have called this epistemological state a subjunctive relationship to the screen – the viewer is constantly aware that things could have been otherwise. This state is grounded in the viewer's continual knowledge that what is on screen is a result of her interactions – inaction, naturally, counting as decisively as action.

The subjunctive mental state is in direct opposition to the epistemology I identified as essential to the mainstream cinema, a conception of the screen complex as unalterable, the events in the diegesis as inevitable. In an advanced interactive cinema, everything will be in flux, open to the possibility of change – like conversation or competitive sports – and the more sophisticated the system, the more fluid and wide-ranging the possibilities. Awareness of this liquidity has radical consequences for a viewer's relationship to the cinematic material. In terms of the Lyrical, the exploration of a single image-moment, the success of a work of interactive cinema depends on its viewer's recognition that behind each element of the screen complex there is a potential set of cinematic data that supports it, enriches it, or accounts for it.

There is another factor too: the viewer must be kept always aware that it is his, her action on a particular image that has produced these new sounds or pictures, and techniques to foster this awareness must be developed. In my judgment, the most immediately available techniques can be found in the language of montage. A deliberate use of film-editing strategies can keep re-convincing the viewer of the specificity of connections between old and new elements, between the elements already there and those produced by viewer action. Once the interactive work has brought the viewer to the idea that his actions on the screen complex always contribute to the continuing significance of the work, then the associations can roam more freely than in the city zoo of conventional narrative film. Now the fact that the viewer feels that he produces the new elements predisposes him towards finding links, associations, and connections that may not have operated in his response to a conventional cinematic work.
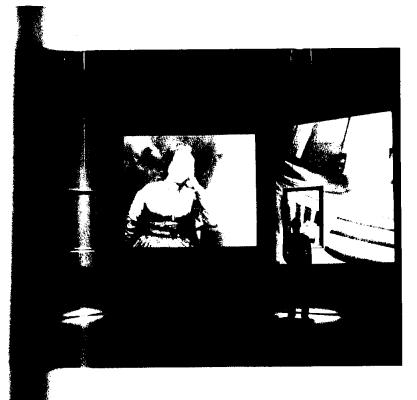
1 Salman Rushdie, op. cit.,
   pp. 71-72

Back to the Ocean

"And if you are very, very careful, or very, very highly skilled, you can dip a cup into the Ocean," Iff told Haroun, "like so," and here he produced a little golden cup from another of his waistcoat pockets, "and you can fill it with water from a single, pure Stream of Story, like so," as he did precisely that, "and then you can offer it to a young fellow who's feeling blue, so that the magic of the story can restore his spirits. Go on now; knock it back, have a swig, do yourself a favour," Iff concluded. "Guaranteed to make you feel A-number-one."[6]

So now we have two models of potential structure for an interactive cinema: one drawn from a classical text by the father of psychoanalysis, the other from an introspective view of the mind at work. There are many literary precedents for both models. Furthermore, a number of current works of fiction have forms that eminently suit the notion of an interactive cinema, either in that they involve the unpacking of a given image or scene into its underlying components– Graham Swift's *Waterland* provides several excellent instances – or that their narrative consists of the meeting point of a number of interrelated themes – John Barth's *Tidewater Tales* and his masterful *The Last Voyage of Somebody the Sailor* are two outstanding examples. More recently Graham Swift has written *Last Orders*, a novel with a constantly changing first person narrator, and John Barth's *On With the Story* and *Coming Soon*, both of which require the reader to split his or her attention among many chapters simultaneously in order to fully comprehend the story.

Tying Up and Getting Out

There are still, there will always be, loose ends. Given that narrative is imposition of order on chaos, intrusion of form on the formless, and that the order, the form, the logic narrative imposes is of time and sequence, sequence in time, we must now ask again whether we can retain narrative when we abandon endings, when we are entangled in an endless middle. A catchphrase often used by theorists to describe narrative is "the illusion of sequence," but in Freud's conception of dream interpretation we can see how strict sequence can be abandoned without losing the narrative thread. Freud's understanding of dream-structure is an alternative to the Aristotelian model, not only because the components can appear in any order, but also because the story is never over, the analysis is always incomplete, there are always more biographical details to uncover. In an Interactive Cinema, where the desire for closure can also be more or less overcome, the viewer continues to

Grahame Weinbren,
James Cathcart
Tunnel
2000
five-channel architectural
interactive cinema installation
computer-controlled DVD array,
industrial infrared-sensor
interface, custom hardware
and software
dimensions and duration
variable
installation view:
Zeche Zollern coal mine,
the Ruhr Valley, 2000
commissioned by the City of
Dortmund for the "vision.ruhr"
exhibition
collection of the City of
Dortmund
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explore the narrative space until he considers it exhausted. There is no totality, there is only withdrawal.

And yet. And yet.

However.

Butbutbut.

Real Time cannot be trashed with the need for closure like potato peel or an old jalopy. There is, there always will be, a Beginning, an End to a viewer's exposure to an Interactive Cinema work, and a Time Between. She walks up to the device, she interacts with it, she walks away. He walks up, sits down, stays a while, gets up. Do we place a viewer with an interactive work until it starts to repeat on him like rote learning or yesterday's overspiced entree? The Interactive Cinema will succeed only if, in retrospect, the experience seems substantial.

All and any loose narrative ends will never be knotted; this is one of the features (not bugs) of interactive cinema. If a viewer navigates through a mass of material, some of it will be seen and some won't, and surely some of what isn't seen earlier will raise issues that remain unresolved in what is seen later. But a system can be sensitized to repetition, either so as to avoid it, or so that as soon as repetition starts the viewer is offered the opportunity to enter a structurally different region, a territory of culmination or summary. In general terms, a map of territory covered can be kept by the system, and once a certain area has been explored, closure possibilities can be introduced.

In *The Erl King* (1983-1986), after certain segments have been repeated, a box with the work "END?" appears on the screen. If this box is touched, it produces a mildly interactive segment that starts with images of a few key production crew members touching the inside of the video screen from within the monitor, followed by a rapid series of production stills. A viewer can switch on or off two cardinal theoretical texts overlays – texts by Wittgenstein and Baudrillard that describe something of the theoretical underpinnings of the work – by touching different areas of the screen.

Sonata (1991/1993) reserves two narrative segments that are acknowledged and indicated throughout the piece. If the viewer perseveres, following a story through to one of its climactic moments, the reward will be one of the two culminating murder scenes, one decorated with the blooming image of a blood-fountain, the other with the voluptuous sounds of a blade severing flesh and splintering bone. The possibility of viewing these scenes emerges when the viewer has covered a certain amount of the narrative ground of the piece. And after the murder the work ends or, more precisely, returns to the beginning.

Frames (1999) has internal endings. A viewer attempts to transform a contemporary actor into a nineteenth-century mental asylum inmate, a Mad-Woman, based on the first photographs taken in a mental institution (by Hugh Diamond in the 1850s when photography was in its teens). When the viewer succeeds in fully transforming his actor into character (there are some obstacles), she will move, in character, to the center screen, and enact a small drama. If two viewers succeed together, their characters will meet on the third screen. After the drama is over, the piece returns to its opening screens.

All this is to say that despite its need for an opened narrative, closure cannot be banished from the Interactive Cinema. Remove the imminence of closure and we begin to drain cinema of desire. Closure must be recast in a more radical light.

The most fruitful possibility for me at this point, based on my interest in multiplying and intermingling narratives, is that several story lines continue until one, some, or all of them end. Here the idea is that – numerous Diegetic Times are constantly flowing forward, many narratives operating in time simultaneously whether or not the viewer encounters any particular one. Narrative Time in this model always moves inflexibly on. This provides another picture of a form for the Interactive Fiction Cinema, a picture of multiple narrative streams not interconnected by a central image, theme or scene. The viewer navigates from one current to an adjacent one in a constantly flowing river, crossing between streams of story at moments of similarity or juncture. Or, to descend one level more, they might rather be thought of as potential narrative streams, elements themselves unformed or chaotic, but taking form as they intersect, gaining meaning in relation to one another.

In *Sonata* I attempt this by juxtaposing the stories of Podsnyeshev (the anti-hero wife-killer in Tolstoy's *Kreutzer Sonata*) and Judith (the apocryphal heroine who decapitated the enemy general Holofernes). Both narratives progress, but it is at their connections, where the viewer can cross from one to the other,

that they come into focus and take on meaning. A viewer will access an episode of one or the other narrative but not both, and their forms are similar enough that their plot movement can be seen as concurrent. Each of the two killers – Podsnyeshev and Judith – is reflected in the light of the other, since each emerges out of the story context of the other. And thus an act of interpretation is forced on the viewer: the morality of each character comes into question when they are placed together, especially because the former is presented as Evil and the latter as Good.

Without the act of interpretation, the stories are raw and problematic, but when clashed together at the points of interaction, a judge's role is forced on the viewer. As Eisenstein recognized explicitly, Griffith at least implicitly, and Kuleshov claimed as his own, meaning in cinema is determined by context – in the multi-linear narrative interactive cinema, context is in constant flux, the elements appearing always different as their surroundings shift.

As the viewer is drawn in by the act of interpretation, now the magnetic attraction of the Interactive Cinema can be felt, and the question of Experienced Time finally answered; for it is here that the Hacker mindset takes over – as we jack into Gibson's Cyberspace. Umberto Eco describes the state somewhat more suggestively than Gibson does, though Eco is talking about the travels of a steel ball around an electric pinball surface, not a sprite in a graphic representation of a data environment.

"You don't play pinball just with your hands, you play it with your groin too. The pinball problem is not to stop the ball before it's swallowed by the mouth at the bottom, or to kick it back to midfield like a halfback. The problem is to make it stay up where the lighted targets are more numerous and have it bounce from one to another, wandering, confused, delirious, but still a free agent. And you achieve this not by jolting the ball but by transmitting vibrations to the case, the frame, but gently, so the machine won't catch on and say Tilt. You can do it only with the groin, or with a play of the hips that makes the groin not so much bump, as slither, keeping you on this side of an orgasm."[7]

Parallel to Eco's pinball machine is a game like Tetris, in which the player arranges falling shapes into an unbroken plane, a theater of geometry and spatial anticipation one often sees played on long airplane flights – as the time sense is held in abeyance, the magnified time of the cramped Atlantic crossing is compressed into a single moment of hypnotic focus. Tetris' hook of involvement is the desire for closure, for the completion of the pattern, an end that is always attainable but just out of reach, like Eco's "brink of orgasm." It is in this space that the machine absorbs time, providing in its place the never-quite-fulfilled promise of consummation.[8]

Ending, Open Ending
Where have we come to? How to provide closure to this document? Must I close it, or can I emphasize its openness, the ends I am leaving loose, the ties unbound?

"... each story runs into another story, and as one guest is advancing his strip, another, from the other end, advances in the opposite direction, because the stories told from left to right or from bottom to top can also be read from right to left or from top to bottom, and vice versa, bearing in mind that the same cards, presented in a different order, often change their meaning..."[9]

There is the very central question of what function is left to Narrative in our Cybernetically Determined, Information Laden Era, as we travel along the Information Superhighways without stirring from our desks. Do we still need narrative to provide lessons in living and dying, do these lessons come to us through other channels ... or don't we need such lessons any longer? Then there is the very important and subtle idea, expressed by philosophers in the wake of Heidegger such as Paul Ricoeur, that the conceptual relationship of narrative and time is reversed: that we impose a (false) linearity on time because our stories about ourselves and others, our formation myths of what it is to be human, take shape as linear narratives, and upsetting this notion will change our understanding of temporality and hence our understanding of the world and ourselves.

But I must stop. It is late, my eyes hurt from looking too long at the CRT, and I'm afraid I'm getting the 'flu.

Graham Weinbren

[7] Umberto Eco *Foucault's Pendulum*, Martin Secker and Warburg, London, 1989, p 222

[8] This was written in 1995, before the emergence of the computer game culture and its conquest of Hollywood. Now (2002) airplanes have games built into screens in the seat backs. But the point about the erasure of the perception of time's passage remains unchanged. I have written about the computer game and its false promises in "Mastery: Sonic C'est Moi," *New Screen Media. Cinema/Art/Narrative*, Martin Reiser and Andrea Zapp (eds), BFI Publishing, London, 2002.

[9] Italo Calvino, *The Castle of Crossed Destinies*, Harcourt, New York, 1979, p. 41.