## Timespaces in spectacular cinema: crossing the great divide of spectacle versus narrative

AYLISH WOOD

Do digital effects add anything more than detail to the workings of narrative in contemporary Hollywood films? The answer to this question is, of course, that it depends on the particular ways in which digital effects are used in the generation of a narrative. Although digital effects can be found in many kinds of films, and frequently pass unnoticed when used simply to tidy the image, critical responses have revolved around action and/or science fiction films, reflecting the extent to which these kinds of films have driven the early digital work in live-action films. The films most often cited to illustrate the progression of digital effects - Tron (Steven Lisberger, 1982), The Abyss (James Cameron, 1989), Terminator 2 (James Cameron, 1991) and Jurassic Park (Steven Spielberg, 1992) all belong within these genres. Furthermore, the generic conventions of action and science fiction film, such as massive explosions, fantastical worlds and events, allow for and often demand that all of the available special-effects technology be put to use. Since this often involves the creation of extraordinary images, whether landscapes, morphing figures, or strange and wonderful creatures, the focus of discussion of such films has been on the contribution of digital effects to spectacle.

'Digital effects' is, however, a vague term, as it covers a range of possibilities that include computer-assisted or computer-generated effects. While films such as *Toy Story* (John Lasseter, 1995) and *Shrek* (Andrew Adamson and Vicky Jenson, 2001) are wholly

computer-generated, the majority of live-action films I discuss in this essay combine either computer-assisted or generated images with those produced with optical processes. Examples of computer-assisted include the complex combinations of colour and black and white in *Pleasantville* (Gary Ross, 1998), or the digital composting in the closing scene of *Die Hard 2* (Renny Harlin, 1990). Examples of computer-generated include the ghost effects in *Ghostbusters II* (Ivan Reitman, 1989) or the bus in *The Sweet Hereafter* (Atom Egoyan, 1997) Despite these differences I continue to use the term 'digital effects', as frequently the images combine both assisted and generated effects. Although spectacle is nothing new to cinema, and was in many ways the foundation of early cinema, it can be argued that advances in digital effects extend the possibilities of an already existing expertise. In *Industrial Light and Magic*, Mark Cotta Vaz comments:

In the post-*Jurassic Park* era, computer technology has provided filmmakers with the ability to create wholly unique characters or digitally manipulate composite elements with a freedom not possible with the old photochemical means. As such, the new digital tools provide a corollary freedom for art directors, who are dreaming up the dynamics and visual look of a shot.<sup>1</sup>

This quotation concludes with the proposition that digital effects provide a freedom in the dynamics of the shot, an idea I shall use as the focus for this essay

In this regard, the key aspect in the dynamic of a shot is the relationship between time and space. I am interested in the ways in which digital effects have the potential to introduce a spatial progression to narrative. By this I mean that digital effects produce spaces with the ability to transform, or which have a temporal quality, thus adding an extra dimension to the narrative progression This contrasts with a number of existing analyses of spectacular cinema, where two distinct positions emerge in relation to time, space and narrative The first position suggests that spectacle interrupts the *flow* of narrative, and the second that it enhances the *effect* of narrative. Andrew Darley represents the first position.

If, ultimately, the spectacular aspect has always been viewed as subordinate to and in a sense subject to the control of a repressive narrative logic, this is precisely because *spectacle is*, in many respects, the *antithesis of narrative* Spectacle effectively *halts* motivated movement. In its purer state it exists for itself, consisting of images whose main drive is to dazzle and stimulate the eye (and by extension the other senses)<sup>2</sup>

The view that spectacle interrupts narrative progression both reveals and relies on an opposition between time and space, an opposition that can also be found in more general ideas about visual narrative:

1 Mark Cotta Vaz Industrial Light and Magic Into the Digital Realm (London Virgin Books, 1996) pp. 28–30

2 Andrew Darley Visual Digital Culture Surface Play and Spectacle in New Media Genres (London Routledge 2000) p 104 Emphasis mine

- 3 Richard Maltby with Ian Craven Hollywood Cinema an Introduction (Oxford Blackwell Publishers 1995), p 193
- 4 Steve Blandford, Barry Keith Grant and Jim Hillier, *The Film Studies Dictionary* (London Edward Arnold 2001) p 220

5 Although she does not use the term Vrvian Sobchack is here discussing what many other commentators refer to as spectacle Vivian Sobchack, *Screening Space the American Science Fiction Film* second edition (New Brunswick NJ Rutgers University Press 1987) p 262 space is perceived as an arena in which narrative progresses, the place where events occur. Its function is to support the progression of events that exist in time, especially through an emphasis on characters, their motivations and their actions. Discussing space, Richard Maltby states: 'In a movie designed for a single viewing, the representation of space must be both comprehensible and significant. It must provide the audience with a sense of the relation between characters, and between events unfolding in the fiction.'<sup>3</sup> A similar position is found in *The Film Studies Dictionary*: 'space in cinema is organised both to convince us of credibility of the world represented . . and to suggest meaning, usually dramatic meaning, by the way characters are placed in relation to both setting and each other.'<sup>4</sup> In this view, then, space serves to provide cohesion, and to give credibility to both characters and events.

Spectacle is often understood as a particular kind of extended spatial dimension. Frequently referred to as depthless, or as having an excess of surface, spectacle is more image-full than mise-en-scene as it accumulates ever more details. This property is enhanced through digital effects because they can be used to lengthen the screentime during which spectacular elements can be seen, or lengthen the time that spectacular elements remain convincing before drawing attention to themselves as illusions. Think of the difference between the screentime spent on the detail of the RMS Titanic in A Night to Remember (Roy Baker, 1958) and Titanic (James Cameron, 1997). Although in their day the models and optical effects used in A Night to Remember were considered very good, and served the purpose of the film very well, those in *Titanic* provide an added element to the film The special effects supply an authentic air, as the digital rendering of the vast ship creates the site for the various narrative events that will unfold But the digital ship can equally be viewed as state-of-the-art special effects. These effects operate as another *dimension* of the narrative of *Titanic*, the dimension that places a particular emphasis on the story of the fall of this technological giant. It is this potential for seeing an additional narrative dimension that is often overlooked when the extended screentime of spectacular elements (digital or otherwise) leads commentators to argue that spectacle interrupts narrative. Vivian Sobchack encapsulates this critical tendency when noting the suggestion that special effects 'tend to diffuse the film's temporal force, and occasionally ... its narrative coherence'.<sup>5</sup> Instead of providing coherence and unity in the narrative, the exaggerated spaces of spectacle make no obvious contribution to the progression of the narrative, as they seem only to draw attention to themselves as surface, an excess that distracts from temporal flow

Although the idea that space contributes to the unity of narrative also underlies the second position on the relationship between time, space and narrative, the argument here is not about the interruption 6 Warren Buckland, Between science fact and science fiction *Screen* vol 40 no 2 (1999) pp 177–92, 187

- 7 Mirriam Hansen Earty cinema late cinema transformations of the public sphere in Linda Williams (ed) Viewing Positions Ways of Seeing Film (New Brunswick NJ Rutgers University Press 1994), pp 134-52
- 8 Geoff King Spectacular Narratives Hollywood in the Age of the Blockbuster (London IB Tauris 2001) p 36

of narrative flow. Warren Buckland, for instance, draws on the convention of spatial unity in his discussion of spectacular cinema, but does so in a way that contrasts directly with the view of spectacle as a waning of narrative. In his discussion of Jurassic Park. Buckland suggests that digital cinema 'continues the practices of realism and illusionism', but argues that the effects enhance rather than detract from the possibilities of spatial unity.<sup>6</sup> Essentially, digital effects intensify the verisimilitude of an imagined world, and spectacle is realigned with unity rather than excess Geoff King also opposes the view that digital effects have diminished the place of narrative, but the basis of his argument is distinct from that of Buckland. Rather than suggest that digital effects enhance the unity of filmic space, King questions the homogeneity of such spaces Instead of seeing texts as unified, he argues that they are (and to different degrees always have been) heterogeneous Within this view, the two components of spectacle and narrative operate with, rather than against, each other Drawing on Miriam Hansen's suggestion that contemporary special effects films are similar in impact to a cinema of attractions,' King states 'If narrative offers order and coherence, moments of spectacle may offer an alternative, the illusion of a more direct emotional and experiential impact<sup>8</sup> Contemporary spectacular cinema, then, combines spectacular elements with narrative elements and integrates them within the experience of the film

Despite their different approaches to speciale in special-effects films, the views outlined above nonetheless all sustain an opposition between time and space. Whether they suggest that spectacle provides cohesion, interrupts the narrative or acts as an integrated, if distinct, element of a film, these arguments reaffirm the separation of the spatial and the temporal. This separation is also embedded in the idea that narrative progression is primarily achieved through movement in time. As events within a plot organize into a thread, or as causation leads to action, there is movement in time, change occurs, and narrative goes onwards But space, and by extension spectacle, remains a subordinate element in the generation of meaning because it is seemingly there only to support and unify, to give rise to the place in which the changing events occur. This position denies space a temporal dimension. Digital effects, however, most specifically when they extend the duration of spectacle or give extended movement to spatial elements, introduce a temporal component to spaces For instance, in Twister (Jan De Bont, 1996) the images of the tornadoes are created through detailed computergenerated graphics, full of swirling movement and power as the storm races destructively across different tracts of land. The spectacularity of these images is in no doubt, but having named them as spectacle it seems absurd to then say they refer only to themselves and so contribute nothing to narrative. One of the points

of *Twister* is the power of these forces of nature, and the digital effects generate that element of the narrative. This occurs not only through the audiovisual details of the tornadoes, but also through the time that they remain onscreen In *Twister*, the space of the tornado is not used to create a place for the story about the central characters, and as the tornado's onscreen temporality is extended, an additional dimension of the narrative is introduced.

A way of beginning to think about such temporal dimensions of space is to mobilize the term 'timespace'. A related term, 'spacetime', is already in use in modern physics where it indicates a revolution in the understanding of the relationship between time and space, which occurred in the early years of the twentieth century through Einstein's theory of relativity.<sup>9</sup> This theory broke with the classical view that time and space are absolute or wholly separate and instead introduced the idea that they are relative. But how is this concept useful when thinking about spectacular cinema? The usefulness lies in keeping in place the idea of the relative relationship between time and space, and how they can both make contributions to the progression of a narrative. As a combination of the two words 'time' and 'space', timespace avoids reiterating the opposition between them but also indicates that space has a temporal component. Indeed, the recently published collection of essays. Timespace Geographies of Temporality, uses the term specifically to indicate this relationship between time and space within human geography.10

Following this formulation, space is understood to operate in two connected ways. It acts as a space when contributing to the mise-enscene and the integrity of the image, but it can also have a temporal dimension and so exist as a timespace. And if narrative by definition occurs through progression in time, then temporalized space can also make a temporal contribution. However, the degree to which this is evident varies from film to film. Whilst digital effects are central to the construction of some images in *Fight Club* (David Fincher, 1999), they contrast with those of the tornadoes in *Twister*. At the end of *Fight Club* complex digital effects are used to generate the exploding tower blocks that form the finale of Project Mayhem Here, the digital images serve less to extend the time in which a spectacular element appears onscreen than to create the illusion of reality They operate to produce a space as conventionally understood rather than to produce a timespace.

Two positions underlie this distinction between digital images which extend the temporality of special-effects spaces and those which secure the illusion of reality. The first is concerned with how digital effects introduce a dynamism, and hence temporality, to spatial elements; the second is concerned with how this dynamism has the potential to institute an additional element in the relationship between the mobile agents of the narrative and the spatial elements

9 See for instance Brian Greene The Elegant Universe Superstrings, Hidden Dimensions and the Quest for the Ultimate Theory (London Vintage 2000)

10 Jon May and Nigel Thrift, *Timespace Geographies of Temporality* (London Routledge 2001) The ability to create dynamic spatial elements with a temporal quality through digital effects is most obvious in images where normally inanimate spaces literally become mobile. This is a device frequently found in fantastical films where portals open into other dimensions, as in Stargate (Roland Emmerich, 1994) and The Last Action Hero (John McTiernan, 1993), or where magic is used to reorder a wall into a door as in Harry Potter and the Philosopher's Stone (Chris Columbus, 2001). Another device is the reconfiguration of usually static objects into active and moving elements, an effect found in horror films such as the remake of The Haunting (Jan De Bont, 1999) Here curtains and walls become animated elements within the narrative as they participate in Hill House's communications with Nell. Other examples of this dynamizing use of digital effects include the stained-glass figure that 'comes alive' in Young Sherlock Holmes (Barry Levinson, 1985), the pseudopod in The Abvss, and the sandstorms of The Mummy (Stephen Sommers, 1999) But, as in the case of Fight Club, not all digital effects provide a dynamic aspect to the spatial elements of the image. Digital buildings in many films are non-dynamic in the sense that they often act only as the extended backdrop to the action of the human characters, as in Lara Croft Tomb Raider (Simon West, 2001) and AI Artificial Intelligence (Steven Spielberg, 2001). Similarly, the computer-generated planes of Empire of the Sun (Steven Spielberg, 1987) flash across the screen to provide the detail of the bombing raids

Dynamic and non-dynamic digital effects provide two possible categories of timespace. In one category (non-dynamic) the temporal aspect of the spatial elements is relatively weak. The digital effects can be used to evoke detailed images, but they remain primarily in the background, creating the fictional reality for the plot. In the second category (dynamic), the temporal quality of the spatial elements is stronger as the digital effects dynamize the spaces of the storyworld In all of the films discussed here, this dynamism is tied into the generation of a distinct narrative, as the dynamic elements are embedded in a narrative that emerges through a progression across time and space. Although tied to a narrative progression, the dynamism of timespace, however, does have consequences for thinking about the relationship between progression and characterbased events. In mainstream films, characters are accepted as a key frame of reference, whether in terms of representation, as foci for various kinds of identification, or as agents to carry the plot forward The narrative revolves around events that are caused by individuals of some kind, and while these are most often human they can equally be animals, robotic machines, aliens, and so forth. Whatever their apparent nature, a feature common to these characters is that they act as agents with an effect, to lesser and greater degrees, on the flow of events

11 Gilles Deleuze, *Cinema 1 the Movement–Image* (London The Athione Press 1992)

12 Ibid p 141

Gilles Deleuze uses this idea in his definition of one of the three aspects of the movement-image, the action-image.<sup>11</sup> According to Deleuze the action-image is the relation between a character and the situation in which they find themselves, where situation is defined by surroundings, other characters and ongoing activities. The emphasis, however, remains on the action of the character: 'The character reacts in his [sic] turn (action properly speaking) so as to respond to the situation, to modify the milieu, or his relation with the milieu. with the situation, with other characters',<sup>12</sup> In other words, the characters are not only agents that affect the narrative, they are also mobile agents that ensure the flow of the narrative, and frequently are literally mobile themselves. It follows from this emphasis on characters that elements of the storyworld unable to act or react are not seen as contributing to a movement through narrative, and therefore they are aligned, implicitly or explicitly, with space. If such elements are, however, made to act (though not react, as they are not necessarily animate), or move within the space, then they too can have the effect of modifying the situation, and as such can operate as mobile agents of the narrative I am not suggesting that such elements are in any sense the equivalent of characters, only that characters are not the only means through which situations can be modified. To return to Twister, the tornadoes are not the backdrop for the romantic troubles of the central protagonists, instead, the tornadoes act as another dimension of the narrative They are mobile agents in which the environment of the film is modified, and in this case the modification is particularly dramatic. A consequence of this argument is that the narrative of a film such as Twister works through competing elements - those of the character-based romance, and those of the tornado To clarify this argument, it is useful to make a comparison with some non-digital special effects in earlier films such as The Wizard of Oz (Victor Fleming, 1939) and The Birds (Alfred Hitchcock, 1963)

A central element of *The Birds* is the birds' attack on the human inhabitants of Bodega Bay Convincing images of these attacks were produced using actors and trained live birds in combination with rear projection, models and animation, which were integrated using optical processes Looking at *The Birds* in terms of special effects and narrative elements, the birds operate as active elements within the narrative Although without clear motivation, they represent the threat within the film. In this sense, like the tornadoes of *Twister*, they act as mobile agents within the film that are effectively created by the special effects available at the time. But the distinction between *The Birds* and *Twister* is the kind of mobile agent that is given dynamism within the narrative. In *The Birds* the objects are in themselves animate, and the role of the effects is to make them seem realistic, within the context of the plot. This kind of special-effects work is found throughout the history of cinema. From such figures as Georges Méliès, Willis O'Brien and Ray Harryhausen to current experts in three-dimensional computer animation and animatronics, there has been a tradition of bringing creatures to life, whether realistic as in *The Birds*, or fantastical as in *Jason and the Argonauts* (Don Chaffey, 1963) Digital effects, in combination with animatronics and modelling, continue this tradition.

By contrast, in *Twister* the digital effects of the tornado extend the possibilities for recreating the natural phenomenon onscreen. To explain this further, a comparison can be made with The Wizard of Oz. Since the tornado in The Wizard of Oz causes the event which knocks Dorothy unconscious, it could be argued that it acts as a mobile agent within the narrative. In this case innovative special effects were used very effectively to create distance shots of the tornado - a thirty-foot muslin funnel suspended from a gantry was moved across the set in conjunction with a smoke machine which produced the 'sand' clouds at its base. The closer images of the tornado were produced using a different device. When Dorothy looks out of a window, the image visible to the audience is of a separate series of projected figures - a cow, Miss Gulch, a man on his bicycle - apparently caught up in the swirling effects of wind and sand Again, it could be argued that these images of the tornado compete with those of Dorothy, who is simply sitting and watching. But within the film overall the tornado is only a minor element, as The Wizard of Oz is really about the journeys of self-discovery of the four central characters. The potential for the special effects to form a competing element within the narrative is, then, also dependent on the extensiveness of their plot function. In Twister the plot is concerned with a group of scientists who chase tornadoes. And a part of the narrative is created through the digital effects that allow the twisters to appear and reappear, showcasing both the possibilities of special effects and also the tornadoes' strange behaviour as they divide into 'sisters', leap and wreak devastation across the countryside The tornadoes do not appear briefly as a plot device to allow something else to happen; instead, they form an additional narrative dimension that competes with that of the human figures.

Digital effects therefore have the potential to introduce a dynamism to narrative spaces, one which can be addressed by a reconfiguration of ideas about the relationship between time and space in the cinema through the idea of timespace. There are two consequences to this use of timespace The first is that dynamic digital effects introduce an additional element to the narrative – a different kind of mobile agent. This in turn leads to the second idea that in spectacular cinema using dynamic digital effects the images are built around competing elements. In the remainder of this essay I expand on these ideas through a discussion of three recent films, each of which has been noted for its use of digital effects: *Gladiator* 

(Ridley Scott, 2000), *The Perfect Storm* (Wolfgang Peterson, 2000) and *The Matrix* (The Wachowski Brothers, 1999). All make extensive use of digital images, but do so in quite distinct ways, each producing a different kind of timespace: a relatively non-dynamic space and a more dynamic timespace

Gladiator, with digital work by Mill Film, won five Oscars, including those for Best Effects (Visual Effects), Best Sound, Best Music (Original Score) and Best Art Direction (Set Decoration) The construction of the storyworld of *Gladiator* depends on digital and non computer-assisted effects, and on the film's release much was made of the apparent realism of the imagery. Much of the visual impact of *Gladiator* is produced by the detailed design of the architecture of the set, including the furnishings and the statuary The costumes - including the ordinary clothing of the various strata of the Roman world, army uniforms and those for gladiatorial combat also contribute to the recreation of the imagined past of the Roman Empire. This imagined past is based on artefacts from the Roman period, and paintings by the nineteenth-century artist Jean Leon Gerome, but it also echoes the grand scale of the Hollywood epics of the 1950s and 1960s.<sup>13</sup> The scale of the crowds in the chariot race scenes in the Circus Maximus of both versions of Ben-Hur (Fred Niblo, 1925, William Wyler and Andrew Marton, 1959) and the battle sequence between the slaves and the Romans in Spartacus (Stanley Kubrick, 1960) are echoed in *Gladiator*, as is the scale and splendour of the city of Rome. The technique of using optical effects to produce the upper layers of people in the Circus Maximus in Ben-Hur is a device reused, though technologically updated to a digital effect, in the more recent film.

Taken together, these components - the scale of the scenes, the set design, the use of costume and the music - create the setting in which the central characters of the film operate. The uses of digital effects in Gladiator are in keeping with the contribution of non computer-assisted effects that is, they serve primarily to support the actions of the human characters. The movements through the spaces, whether digitally constructed or not, remain allied to the movements and actions of the characters. Rather than dynamizing the spaces of the narrative, the digital effects are primarily used in the 'classical' sense - to enhance the illusion of a carefully constructed reality. For instance, various special effects are put to use, including animatronic lions in the arena, and layers of digitally crafted crowds in the upper levels of the Coliseum, as well as some of the more extended views of Rome. But despite the detail of this digitally constructed Rome, it functions only to support and complement the various activities of the human characters - the machinations of Commodus, Lucilla and the Senate along with the various heroic antics of the Gladiator Maximus. As a tale of tragedy and revenge, the spectacle in *Gladiator* is in keeping with the epic films of the

13 Details of the making of Gladiator can be found in Ridley Scott and Walter Parkers Gladiator the Making of the Ridley Scott Epic (London Macmillan, 2000)

1950s and 1960s, with a particular emphasis on scale - the size of the crowds whose mass favour can be won or lost, the vast expanse of the city and the massive structure of the gladiatorial arena, the Coliseum. But this emphasis on scale does not often provide another dimension of space, a space dynamized into a timespace. The unveiling of the Coliseum is one of the few moments within Gladiator when the human action elements of the narrative give way to a different timespace As Maximus, Hagan and Juba stand looking upwards, there is a tracking movement towards them, a track that lengthens the pause between shot and countershot, and so provides a degree of suspense. But when the characters' view of the Coliseum is shared with the audience, its spectacular entrance is quickly upstaged by Proximo as he moves centre-frame Thus, although the digital Coliseum is meant to be an arresting sight, it takes up little screentime as a spectacular element in itself. Any potential shift, even a very brief one, from a space that emphasizes the human characters to one that does not, is stalled. Instead, Maximus's position as the central and tragic figure of the narrative is ensured as the organization of space generated though digital and non-digital filmmaking places him as the primary focus of attention.

In contrast to Gladiator, The Perfect Storm combines digital images with filmed action to generate a narrative with different sets of dynamic space or timespaces The Perfect Storm is a dramatization of an extraordinary storm that occurred in 1990 and the death of a group of fisherman who crewed the Andrea-Gail, a swordboat that was unable to outrun it. In some instances the digital images in the film, created by Industrial Light and Magic, function in a similar way to those of Gladiator - providing a coherent space for the place where events occur, the narrative location. A number of digital images of waves provide a background to scenes that were filmed on a set For example, the on-boat sequences were filmed in a water tank in which a full-size model of the Andrea-Gail was mounted on gimbals that provided the motion, the water effects were generated using wave machines, hoses and so on The skill of the digital work in such scenes is to work the two kinds of images seamlessly together and maintain the illusion of the storyworld. But The Perfect Storm can be distinguished from Gladiator by the way in which dynamic spaces are also created around the digital images of the storm. These timespaces are created when the images of the storm become more central to the narrative This occurs as the images of the storm shift from simply providing a coherent location to become instead a competing narrative element about the power of the storm itself. This shift occurs gradually within the film since, as it gathers together various narrative elements, it follows the evolution of the storm These narrative elements are constituted by a series of events whose only connection to each other is their interaction with

the storm Rather than using a linear chain of events, such as the story of Maximus's betrayal and subsequent revenge in Gladiator, the progression of the story is established through the transitions between these sets of events as they build up a sense of the storm. Take, for instance, the 'gathering storm' section of The Perfect Storm the sequence that follows on from the prologue and sets up the story of the Andrea-Gail returning to sea. The gathering storm section emerges across different locations - the Andrea-Gail, and the seas off Bermuda and Sable Island. As the narrative progresses and the images cut between the locations, several effects occur. Firstly, a relationship is established between the different and distant locations, as it is already known that the Andrea-Gail is headed into the storm area. The portent of this journey is evident in the different visual rhythms of the locations About a third of the way into the film there is a transition between the calm and stormy waters of two separate locations The images of calm, relatively long shots with smooth movements are counterposed with angle-framed shots of water pounding on a yacht, along with rapid cuts between the different figures The contrast between these two very distinct rhythms inserts a sense of impending crisis into the narrative, as this is the storm, not yet near its full power, which will destroy the calm of the fishermen

The establishment of a relationship between the different locations is, however, only one effect of the presence of the different spaces Their presence also adds competing elements to the narrative, competing in the sense that a viewer's attention is potentially distributed between the sets of events, which they will have to organize for themselves to make sense of the progression. The two main elements of the gathering storm sequence revolve around the Andrea-Gail, and a more disjointed network that connects to form a second element around the three fronts of the storm. The rhythm of the Andrea-Gail is established around the work patterns of the fishermen as they go through their activities of waking, eating, sleeping and arguing with each other The rhythms of the men working, instead of being associated with times of day, are anchored to the routines of fishing - baiting the lines and hauling in the catch The rhythm of the work on the Andrea-Gail appears self-contained as it is confined to the relatively enclosed area of the vessel - the crew is either inside the small cabin or within the perimeter of the deck In contrast, the storm establishes another rhythm as the three initially separate weather fronts move towards one another.

The effects of these three fronts are demonstrated by three narrative dimensions that are established in the satellite image sequences, the yacht rescue and the tankers crashing through waves. Whilst each of these dimensions is separate, especially in terms of geographic location, the three are linked through the structuring device of the storm Unlike *Gladiator*, in which Maximus is the

figure who pulls the elements into a coherent whole, here the storm performs this function And as it does so, the images of the sea begin to shift from serving as background to being a more active element within the narrative, from forming a location to becoming a timespace For instance, in the sequences with the yacht Mistral, the sea is the backdrop against which the drama of the rescue takes place. When taken with the pitching of tankers in huge digital waves and the satellite images of swirling cloud mass, the elements work to foreground the storm. Not only is it foregrounded, there is also a growing sense of its accumulating ferocity and changing status within the story. The effective rendering of stormy seas through digital techniques ensures that such images can remain onscreen without calling attention to themselves as special effects, a feature that allows them to retain the illusion of reality and contributes to their status as elements of the narrative. Just as the prolonged views of the tornadoes in Twister contributed to their status as elements of the narrative, so the more extended views of the sea and waves in The Perfect Storm contribute to the narrative about the power of the sea. Because this aspect of the narrative is organized in what might appear to be a disjointed way, it is for the viewer to gather these elements together and make sense of them amongst the other competing elements of the storyworld. The storm narrative competes for a viewer's attention that is already distributed across the story of the threat of the storm against various human characters, and also the more marginal strand of the romance.

For much of the gathering storm section of The Perfect Storm, the different elements, created through both digital and non computergenerated effects, serve to generate a sense of the impending catastrophe and the increasing wildness of the storm. The progression of the third section of the film is different, as rather than building up possibilities it finally demonstrates the collision of different fronts of the storm, a device which results in the digital effects constructing a timespace for the massive power of the combined fronts Here the full force of the storm becomes clear, as the narrative elements collide in a maelstrom of images. The sequence opens with a digital dive from a satellite cloud swirl right into the eye of the storm. Its wild energy is captured in the rapid cutting between the rescue attempts (still associated with the yacht Mistral) and the fishermen battling against the storm, as well as within each of two spaces, where rapid cuts and angled shots heighten the effect. The images, which at times verge on the chaotic, are linked by music and dialogue which anchor them to a particular location. On the coastguard vessel, for example, there are a series of very rapid cuts from one group to another, frequently without any linking figure (beyond the storm), but the whole sequence is held together by the dialogue The music is also important as, unlike the dialogue which operates within the confines of a particular location, it provides

cohesion across all of the scenes, even though it frequently has to compete with other sounds.

As well as the rapid cutting which conveys the power of the storm, in this third section the digital effects become visible as central components of the narrative, as the larger waves previously kept in the background take on more visual emphasis by filling the screen space, an effect that is extended in time to allow the waves to be seen. The people in the water are tiny dots on the swell of the massive waves, and the boats appear insignificant and powerless when confronted by the walls of water about to crash down around them. Once the Andrea-Gail has sunk, the power of the sea and nature as an elemental force is triumphant, whilst the human figure of Bobby (one of the crew) is small, insignificant and finally lost as he recedes into the distance of the shot Through these scenes the two competing elements of The Perfect Storm come together in a single timespace As the images show the waves crash over the upturned hull of the swordboat, the narrative of the power of the storm, created through huge digital waves, reaches its apex just as the storm causes the fishermen's death. The use of digital effects culminates in images of waves that not only generate a narrative about the power of a storm, but also make the storm a mobile agent that devastates the environment of the human figures.

The structure of The Perfect Storm leads us as viewers into the eye of the storm, but such extremities of nature are transient. The final images of the turbulent seas, with a voiceover of Bobby's dying words, give way to calm waters skimmed by a helicopter. Once more the human figures and their technology are seemingly back in control. However, this dialectic of storm and calm is not simply about the encounter between humans and nature, as it also operates within the film to reconnect all the images of life and death at sea that have run throughout it, and in particular to return to the people back on land in Gloucester Through a series of intercuts to these people, an alternative narrative space to the timespace of the storm and the men on the Andrea-Gail has been kept active. The images of the growing ferocity of the storm out at sea are counterbalanced by the continuing lives of those back on land. These lives are marked by the waiting and the anxious inactivity of mothers, lovers, exwives, children, the boss, and men too old to be at sea. The shift from stormy to still waters also indicates a change in the film's tone Throughout the gathering storm and storm sequences, the emphasis has been on the building power of the storm, and the digital effects have provided a timespace for it to emerge as a mobile agent within the narrative - it is the storm that changes the situations of many of the characters In contrast, the epilogue re-emphasizes a narrative dimension that had been displaced: the dimension of mourning. This dimension was evident in the opening, pre-credit sequence of the film, which includes images of the sheer marble face of a monument

to the dead, covered with columns of names, and a statue of fishermen in a storm. In its epilogue, the film returns to the image of the names of the dead, and in doing so inserts a place for loss and remembrance

The presence of competing elements within The Perfect Storm makes it difficult to establish a single reading for the film. The different aspects of the storm, the images of rescue and drowning, the weather forecaster's view, that of the other fishermen and women, the timespace of the ferocious storm and the framing images of monuments each provide alternative views or experiences of the story of the storm As a consequence of arguing that The Perfect Storm is constructed around these competing elements, the notion of any of these being the 'real' story of the storm becomes problematic Each represents a different, but equally valid, version of the same event Rather than forming a single coherent version of the storm, one that would organize its story through a unified view, there is a range of realities. This view of The Perfect Storm leads back to debates about narrative as a means of articulating events into an understandable configuration. One aspect of these debates has been concerned with the ways in which fiction films obscure complication and contradiction in order to establish sense and enhance the illusion of the storyworld. The use of digital effects in The Perfect Storm has the potential to tend towards a view of spectacular narrative that maintains, if not extends, an illusion of reality of the kind discussed by Buckland because of the convincing way in which the storms are recreated and integrated into the narrative. However, the construction of The Perfect Storm through competing elements leads away from that potential The digital effects may work strongly to create an illusion of reality, but the competing elements introduce more than one reality, thus offering the viewer more than one way of recreating the story.

Like Gladiator, The Matrix is laden with Oscar-winning visual effects, in this instance created by Manex Visual Effects. And like The Perfect Storm these digital effects introduce dynamic spaces into the narrative of the films. On a relatively superficial level the digital effects literally dynamize objects in the moments after Neo swallows the red pill which heralds his great adventure, the mirror at which he is looking turns to liquid. This reconfiguration of a broken mirror from fractured lines to a fluid mass does not operate simply as a gimmick, it presages Neo's journey Neo, about to break free from the strictures of his alienated existence within the Matrix, moves into a different reality that is as yet uncertain and open to change. The capacity to dynamize spaces also introduces elements within the narrative of The Matrix which provide additional dimensions to the story beyond the more obvious physical actions of the human agents The presence of these elements is evident at different levels of the narrative, and is usually mobilized around the theme of conflict

between two competing forces, humans and machines, where the agents of this contest are humans (or machines mainly played by humans). An emphasis on human agents ensuring change is in keeping with the view that action within a narrative is based around the capacity of human figures to alter the environment of either themselves or other figures.

Morpheus, Trinity and Neo, as representatives of the resistance. and the Agents, as representatives of the machines, form the cast of characters across whom the conflict is played out. The human actionbased sequences, however, are not the only dimension in which a confrontation between the opposing forces occurs, as another dimension is the articulation of the dialogue. Agent Smith, chief emissary of the machines, speaks in a distinctive voice pattern that is slower than that of the human characters, an effect most evident in the interrogation scenes involving Neo and Morpheus. In the interrogation of the latter, the content of the dialogue accentuates the conflict as Agent Smith says to his prisoner: 'The future is our world. Morpheus, the future is our time'. The sense of conflict is further played out through the spatial and temporal dimensions of the image. These dimensions provide an additional location for the conflict that operates more explicitly at the level of the human and machine figures. As the storm of *The Perfect Storm* is established by a digitally constructed timespace, in The Matrix digital effects produce a timespace where the spatial and temporal coordinates are disrupted according to the conflicting demands of the competing forces of the film In The Matrix the story of conflict is both acted out through the characters and made manifest in the construction of the images themselves.

The question of an ability to control space and time is explicit in the activities of the characters The storyworld of The Matrix consists of two apparently distinct spaces: that of the Matrix -amachine-controlled virtual environment powered by energy produced by human metabolism - and that of 'Real World' - an alternative grungy space inhabited by the Resistance. Much of the action occurs in the Matrix, and it is here that the conflict over the spatiotemporal dimensions emerges through the interruption to the machinic space by the Resistance. This interruption, very clear in the actions of the human figures, is also made visible by the play with the space and time of the images. As the progression of images is slowed, stretched and warped, a sense of shifting phases introduces a dynamic quality to the spaces of the film. And it becomes evident that some of the conflict between the humans and the machines will be at the level of the timespace Thus, rather than the conflict being evident simply through the actions of the human actors, the manipulation of timespace through special effects introduces conflict at the level of the organization of the visual images. The sense of a timespace with a manipulable rhythm is here not only a feature of digital effects, it is also a reality for the figures within the narrative.

The Trinity chase sequence, which occurs near the beginning of the film. introduces some of the possibilities of this manipulation of timespace The combination of conventional filmed-action sequences with computer-generated images, wire-work with blue-screen effects, and 'bullet-time', allow Trinity to hang in the air, leap across impossibly wide spaces and reconfigure from a three-dimensional human figure into a signal on a phone line. It is not only Trinity's ability to act on the other human figures which is demonstrated here, it is her capacity to exert control over timespace. The bullet-time images give the impression that Trinity can defy gravity, but within the storyworld of the film it is her ability to distort the normal timespace of the machine world that is established. Throughout The Matrix bullet-time is used to demonstrate how different groups can exert control over the timespaces, as it allows filmmakers to speed up or slow down a sequence of shots, whilst keeping some elements within the same image much slower. For instance, during the rescue sequence in which Morpheus breaks free of his chains and runs across the room, the trajectory of the bullets from Agent Smith's weapon are marked in the splashes of water. Very briefly there is a disjuncture between Morpheus's movement and that of the bullets. Although Morpheus and the bullets co-exist and are moving within the same timespace dimension, the construction of the images shows one set of movements to be subordinate to the other Morpheus is frozen at first in the background, but as the images trace the fired bullet across the room, he is repositioned in the foreground. In this sequence the conflict over control of the timespace occurs on two levels: through the interactions of the characters (Morpheus escaping the Agents), and through the timespace of the images themselves (the trajectory of Agent Smith's bullet takes precedence over the movement of Morpheus). In each of the set-piece conflicts between the Agents and the Resistance - the rooftop bullet-dodging sequence or the battle between Neo and Agent Smith in the underground - the manipulations of the rhythms of the timespace provide an additional narrative dimension to the actions of the human characters.

In this essay I have illustrated some of the ways in which a relationship between digital images and the constructions of narrative can be considered. Films such as *Gladiator* primarily use digital images to create extensive backgrounds in which the human figures can exert effects over the situations in which they find themselves. Digital effects here act to ensure an illusion of reality rather than to add anything to the narrative. In other films, however, digital images generate new dimensions of timespace within their narratives. In *The Perfect Storm*, the structure of the narrative emerges through transitions between different spaces, one of which is a digitally created dynamic timespace.

acts as an additional mobile agent affecting the situations of the human characters *The Matrix* is similar to *The Perfect Storm* in that its digital effects are used to create dynamic and manipulable timespaces that also create an additional dimension within the narrative.

Overall, digital effects can, but do not always, expand the already existing timespaces of narrative, and their potential to exaggerate, or give movement to, elements of the narrative previously seen as support requires a different way of thinking about the relationship between time and space Maintaining the opposition between time and space inevitably results in separating elements into spectacular or narrative components If the two are held together through the idea of timespace, then it is possible to think about narrative as composed of competing timespaces - one effect of which is that an image may contain multiple points of focus The outcome is a need to rethink conventions of narrative in spectacular cinema, a cinema which exists in a continuum with other media that have multiple points of focus computer games, comic book cartoons and multimedia installations Instead of being the death of narrative, as some reports have prematurely suggested, digital effects are able to introduce new dimensions.

