# Sublime Pixels

*Exploring the Audience Experience in Digital Special Effects Cinema*

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## *Abstract*

When exploring the audience perception of digital special effects cinema and the staggering success it has enjoyed, the explorer will often be left with a sense of confusion. They may ask: What is it that the audience is looking for or at when confronted with these pixilated illusions?

This thesis attempts to answer that question. It starts with the basic assumption that what the audience is hoping to achieve when 'touched' by the phenomenal spectacle of the digital image is the very best feeling achievable, or the truly sublime. To do this, the thesis unravels the philosophical and theoretical quandaries that surround audience perception theory. It then examines digital special effects and digital cinema to understand, not only its attraction, but also its power over the viewer lost in its awesome potential.

By exploring the governing theories behind the sublime and audience perception, the thesis is able to contend that the digital special effects image becomes carnally real or 'alive'. Through the examination of a number of seminal digital special effects movies the thesis tries not only to de-mystify the digital image, but to also create an aesthetic, situational 'map' to the feeling of the sublime.

For Sean and Grandma
Without you this never would have happened

# __Introduction__

**Research Question / Thesis Statement**

When I was about 14 years old I went to see *The Abyss*[1]. I didn't know much about computers or digital effects, and I had no idea what I was in store for. As the story unfolded I became captivated by the storyline, and very quickly it felt like I was there, on the submerged station, taking part in the mission. When I saw the Pseudopod for the first time, my experience of film was changed forever. I could literally feel the wet surface and smell the salty tang in the air. From that sublime moment on, digital cinema was a part of my life.

Since then I have fought the T-1000 Terminator, and run with dinosaurs. I have danced my way through *The Matrix*[2], and I have stood on the fields outside Helm's Deep, fighting the invading Orcs. Digital imaging has become an integrated part of not just my life, but of modern cinema. However, its use still bears the mark of Cain. For a number of filmmakers/theorists, including Quentin Tarantino[3], the digital image is not regarded as 'proper' filmmaking. Instead it is perceived as 'unreal' and somehow as a form of celluloid cheating. Digital effect cinema is prophesised as heralding the death of real/reel cinema. There is often a stigma attached to computer generated images, and to those who like or use them in the filmmaking process; a stigma of being swayed by technology and being unappreciative of the 'art' of filmmaking, and as having a penchant for spectacle rather than story-telling and thereby somehow being less than respectable.

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[1] *The Abyss*, directed by James Cameron, 1989.
[2] *The Matrix*, directed by Andy Wachowski and Larry Wachowski, 1999.
[3] Tarrantino has spoken out against digital special effects on several occasions and I will supply a full quote and re-visit his concerns in chapter one.

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In this thesis I will argue instead that the digital image can be more than just a moment of spectacle. I will reason that within the digital image there is a potential for the viewer to achieve a state of the truly sublime. The digital image is a site where the audience and the film can interact at a level of terrifying, full-bodied but borderless immersion. This digital sublime moment is where language or comprehension fails and where the film can become *more* than anywhere else, where dinosaurs can roam free, and the world (and our symbiotic place within it) can be recreated without any physical limitations.

The main question of my thesis is: 'how can the digital image facilitate the moment of the sublime?' Naturally other questions will have to be answered first, such as 'what constitutes the moment of the sublime'; 'what constitutes a digital image'; 'is it *possible* for the digital image to facilitate the moment of the sublime'; and 'how does the digital image differ from the non-digital image'. The trajectory of this thesis will involve the critical journey I have taken to address these questions, moving me towards a greater understanding of the digital image, as well as a celebration, critique and extension of existing realist, experiential, and phenomenological film theory.

**Theory and Method**

By employing the most significant theories that explore the realisation and activation of the sublime moment, I will establish a definition of it in relation to the film viewing experience that takes place when the digital image is at its most powerful. Using Edmund Burke's preliminary work on the sublime[4], and

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[4] Burke. "A Philosophical enquiry into the origin of our ideas of the sublime and beautiful" in Ashfield, ed. and Bolla, ed. *The Sublime: A reader in British Eighteenth-Century Aesthetic Theory,* 1996, pp 131-144.

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Emmanuel Kant's developed study of it[5], I will define the sublime through its sensory qualities. Then, using Jean-Francios Lyotard's work on the sublime, where he extends Kant and Burke's analysis to include reception contexts[6], I will formulate a definition of the sublime moment as it refers to the specific site or meeting place between the film and viewer. This definition will specifically show that the two key prerequisites needed to activate the feeling of the sublime are that the image contains both *power* and *reality* as it engages directly with the viewer. I will then examine the borderless nature of the digital image in order to establish that it holds an immense potential - an inherent power – qualitatively different from the sublime moment found in reel cinema. I will suggest that such a heightened sense of sublimity emerges not only through the direct sensing of the film, but also through the promotional and publicity activities that set up the film as a premium site for receiving the digital sublime.

In order to demonstrate that the digital image contains this inherent potential power I will be making use of Michael Ryan and Douglas Kellner's explanation of technophobia[7], Paul Arthur's exploration of the apocalyptic as an inherent marker in the digital image[8], and Holly Willis' work regarding the narrative possibilities of digital cinema[9]. I will then term this inherent power, this wonderful evocation of the sublime, 'the digital narrative'.

To make historical sense of how the digital image is unique in terms of its sublime nature, I will explore the history of special effects in general, and the digital special effect in particular. This will primarily be done by employing the

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[5] Kant. Critique of Judgment, 1951.
[6] Lyotard. Lessons on the Analytic of the Sublime, 1994.
[7] Ryan and Kellner. "Technophobia", in Kuhn, ed. *Alien Zone*, 1990, pp. 58-65.
[8] Arthur. "The Four Last Things: History, technology, Hollywood, Apocalypse" in Lewis, ed. *The End of Cinema as We Know It: American Film in the Nineties,* 2001, pp.342-356.
[9] Willis. New Digital Cinema: Reinventing the Moving Image, 2005.

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theories of Erik Barnouw[10]. I will further examine the film/viewer relationship specifically in terms of interaction[11], hot and cold media[12], realism[13], and post-modernity[14]. This wider theoretical work will enable me to show how the viewer interacts with the narrative of the film, as well as how the digital image can become intersubjectively real to the viewer. This intersubjective realism, in consort or articulation with the processes of technophobia, technophilia, and the digital narrative found in these films, will be shown to create the *potential* power and *living* reality of the digital image.

Once I have identified the relationship between the viewer and the digital image, I will employ the concepts and ideas of perceptual realism[15], haptic touch[16], the carnality of the image[17], simulacrum[18] and hyperrality[19] to establish how the viewer transforms the potential power and reality of the digital image into the actual power and reality of the sublime moment. I will then explore the various seduction methods employed by film to facilitate the conversion from *potential* to *actual* power and reality. When examining the seduction methods I will chiefly be using the arguments of Jean Baudrillard[20], and Steve Neale[21].

Finally, I will be undertaking a textual analysis of four case studies to establish where the optimum sites of the sublime can be found. I will determine specific

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[10] Barnouw. The Magician and the Cinema, 1981.

[11] Specifically using the change from scene and mirror to network found in Baudrillard. "The Ecstasy of Communication", in Foster, ed. *Postmodern Culture*s, 1985, and his theory of the ecstacy of communication found in Baudrillard. *The Ecstasy of Communication*, 1988.

[12] McLuhan. Understanding Media: The Extensions of Man, 1994.

[13] Introducing the new concept of situational ontology.

[14] Primarily using the theory of Jurgen Habermas, Jean-Francois Lyotard and Jean Baudrillard.

[15] Prince. "True lies: Perceptual Realism, Digital Images, and Film theory", in *Film Quarterly* Vol. 49, no. 3, spring 1996.

[16] Sobchack. What My Fingers Knew: The Cinesthetic Subject, or Vision in the Flesh, 2000.

[17] Marks. The Skin of the film, 2000.

[18] Baudrillard. "The Ecstasy of Communication", in Foster, ed. *Postmodern Culture*s, 1985, pp. 126-134.

[19] Baudrillard. The Ecstasy of Communication, 1988.

[20] Ibid.

[21] Neale. "'You've Got To Be Fucking Kidding!' knowledge, Belief and Judgement in Science fiction", in Kuhn, ed. *Alien Zone*, 1990, pp. 160-9.

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images or scenes that allow for, and invite, the sublime moment to be achieved with(in) the digital image. The four case studies are: *Terminator 2: Judgment Day[22], Jurassic Park[23], The Matrix* and *Lord of the Rings: The Two Towers[24]*. In each case study I will emphasise the key theories relevant to that specific case study, and explain how the particular image or scene holds the potential to be experienced as sublime.

**General Introduction to the Digital Sublime and Case Studies**

Digital images have developed in a trajectory of seemingly exponential technological growth since their introduction in the early 1980s. Like many others of my generation I have followed the evolution of digital special effects with great interest as I have, in a sense, grown up with them. I have always known that digital special effects were somewhat frowned upon, but I have never fully understood it, since, to me, they created the most fantastic visions in cinema.

The sublime seems to be the best description of the feeling I get when a film surprises and exhilarates me to the degree where I know that the film and I will now always be interwoven. It becomes a part of me, and I will always remember the exact scene that made my entire body tingle with delight, the moment where I knew that there was no turning back, where language, cognition failed me, and where I was lost and found in the digital image.

Descriptions of the sublime are often vague and definitions ambiguous. One uniting factor, however, in philosophical descriptions of the sublime**,** is that it is the most powerful feeling achievable. The sublime feeling, then, is one that I

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[22] *Terminator 2: Judgment Day*, directed by James Cameron, 1991.
[23] *Jurassic Park*, directed by Steven Spielberg, 1993.
[24] *Lord of the Rings: The Two Towers*, directed by Peter Jackson, 2002.

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hope to describe in relation to the digital image in cinema, and through my research I realised that this particular area of study has been largely ignored within film studies. Despite vague references in books on film theory, the sublime seems to be discarded, or used to indiscriminately describe entire techniques of filmmaking. To use the feeling as one automatically obtained by a certain filming technique or genre type seems to negate the greatness of the feeling, and I will argue that the sublime *must* be a distinctive feeling exclusive to the individual in a distinctive situation. So, when looking for descriptions and definitions of the sublime I have had return to the source, so to speak, and use the classical philosophical definitions. I have then had to make use of contemporary cinematic theories to texture or inflect these definitions so that in conjoining them they make beautiful sense of the digital sublime in the digital age.

What I have come up with is a definition of the sublime that relates specifically to the individual's relationship with the film text. It is impossible to design or designate an image that is automatically sublime, and so instead I have chosen to examine four of the most successful films employing digital special effects, to find *potential* sites of the sublime. I have chosen these films on four distinct merits. Firstly, they had to represent groundbreaking new technology at the time of their release. Secondly, they must have employed the digital effects *actively*, which means that the digital image has to be easily recognisable *as* digital to the viewer. Thirdly, as I had decided to examine four films and divide them into two groups in terms of the digital image as *function* and the digital image as *form*, there had to be two films from each of those groups. Finally, as I

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am also examining the historical development of special effects, each film from each group had to be at least five years removed from the other.

The digital image is not sublime in and of itself, nor is any other image. The feeling of the sublime can only be achieved through the viewer actively interacting with the image, and it is this interaction that I am examining at a conceptual level. The digital image contains immense amounts of potential power through what I call the digital narrative. It also contains a potential carnal, visceral reality. If the digital image is allowed to be perceived as a valid text in its own right, it presents the viewer with the optimum condition for achieving the sublime moment.

**Chapter Breakdown**

<u>**Chapter One**</u>

In Chapter One I explore the pre-requisites for creating the context in which one experiences the sublime moment. I present the two key elements for its constitution, namely *reality* and *power.* The chapter will also explore how the digital image relates to those elements, and for this purpose I introduce the concept of 'the digital narrative' to explain the inherent power in the digital image. Furthermore, I will examine the two main elements of dystopian power in the digital image: the death of cinema, and the post-human, to exentuate that these concepts not merely instill fear, but provide the audience with a built-in tension that they are invited to relate to, and thereby create an interaction between the digital image and the audience.

### Chapter Two

In Chapter Two I define the digital image as a unique development in the history of special effects. I introduce the concept of 'active and 'passive' special effects to enable me to differentiate them in terms of agency and reception and to explain why active special effects are ones that help create the sublime moment. I also consider the different narrative types, such as the micronarrative of the film and the macronarrative sorrounding the film, and how they relate to the digital image. I then explore how the digital image relates to the perception of reality in a post-modern culture, and, indeed, what constitutes reality in a post-modern context. To explain how the audience in a post-modern world perceive the digital image as a form of obscene, visceral truth I introduce the concept of 'situational ontology'.

### Chapter Three

In Chapter Three I predominantly explore the seductive nature of the digital image, and, in turn, how the potential power and reality of it is transformed into actual power and reality by the viewer's interaction with its unspeakable creations. I introduce the three main elements found in this digital seduction, namely haptic vision, aesthetics, and the 'cinema of attractions'[25]. I then explain how these seductive methods produce a filmic moment in which one can experience full body immersion into the digital image. Finally, I summarise the manner in which the digital image becomes a facilitator of the sublime.

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[25] I will exclusively be using Tom Gunning's definition of the cinema of attractions: Gunning. "The Cinema of Attractions: Early Film, Its Spectator and the Avant-Garde", in Elsaesser, *Early Film: Space, Frame, Narrative*, 1990.

**Chapter Four**

In Chapter Four I analyse *Terminator 2: Judgment Day* and *The Matrix*, which both make use of digital special effects as functional tools. I analyse how this relates to the digital narrative, and I examine specific scenes in both films in order to reveal and explore the optimum sites in which the sublime moment comes into being.

**Chapter Five**

In Chapter Five I am concerned with how the digital protagonist/antagonist relates to the notion of the post-human. I examine *Jurassic Park* and *Lord of the Rings: The Two Towers* to discuss how the digital creature is set up in the micro and meta-narrative contexts of the film, and how the digital narrative functions as a source of power for the viewer's experience of that creature. As in Chapter Four I reveal the optimum sites for the sublime moment, and lay out the seduction methods used.

**Conclusion**

In the conclusion I summarise my findings, and explain how the viewer can understand the image as containing both reality and awesome power. I further explain how the digital image, as a representative of technology, and through its limitless nature, contains the pre-requisites of the sublime feeling, and therefore is an optimum medium for it. Finally, I theorise on what further research could be beneficial to understanding the sublime feeling in the digital image and where I believe digital special effects are headed in the future.

# **Chapter One**

## *When the Sublime Becomes Digital*

One can define the sublime as that elusive feeling of greatness and power when observing nature's splendour or a piece of art that touches the very soul. This concept of the sublime is ancient, dating back to 100AD where the Greek philosopher Longinus used it for the first time in a known written text[26]. During the late sixteen and seventeen hundreds several philosophers offered their definitions and thoughts on the subject. The best known works include Immanuel Kant's *Critique of judgement*, first published in 1790, where Kant states that "We call that sublime which is absolutely great" and "showing a faculty of the mind surpassing every faculty of sense"[27]. He states that the sublime differs from the sense of beauty in several ways, most notably that beauty belongs to the realm of understanding and the feeling of the sublime belongs to the realm of reason. Understanding something is a faculty that deals with passing immediate Judgment on a subject from a pre-existing set of rules which constitutes cognitive reasoning. Beauty, on the other hand, in this sense is an aesthetic Judgment. The feeling of the sublime deals with reason because in order to fully feel the sublime we must reason that the subject in question is truly great and surpasses ourselves and our understanding[28]. As Lyotard later argues, when analyzing Kant's definition of the sublime, both the description of beauty and the description of the sublime present an aesthetic reflection. The

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[26] The text was discovered and first translated by Nicolas Boileau-Despreaux in 1674.
[27] Kant. *Critique of Judgment*, 1951, p. 66.
[28] Ibid.

sublime, however, surpasses any notion of beauty because it releases us from what he calls *the human condition*[29]*:* we are no longer prisoners of our senses or indeed of our reality when contemplating the sublime. In order to appreciate beauty we must sense the subject and from those senses pass Judgment on the subject, whereas the sublime is pure cognitive reasoning, which reveals an aporia in the human condition, namely the feeling of something that surpasses anything that can possibly conceive, yet at the same time an appreciation of that same feeling[30].

This modern notion of the sublime is first formulated by the Irish philosopher and politician Edmund Burke, who in 1759 stated that beauty and the sublime were mutually exclusive. For Burke they present a dichotomy since beauty should present us with a calm sense of peace and the sublime should present us with an inner darkness, a horror[31]. According to Burke, the sublime cannot exist without an inner terror at the appreciation of the sheer enormity of the feeling, and even though beauty and the sublime are often found in the same texts they present two separate and mutually exclusive moments that can never be present at the same time. Burke likens them to light and dark, which is often found in the same artwork, but can never occupy the same space, lest it becomes something new that is less powerful than the separate parts.[32] Burke links the sublime to power; whereas beauty is most often found in the frail and gentle, the sublime must be found in objects or experiences of power that threaten us in some way. The sublime is a force of terror or at least of some danger to us,

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[29] Lyotard. *Lessons on the Analytic of the Sublime,* 1994, p.75.
[30] Ibid., pp, 77-8.
[31] Burke. "A philosophical enquiry into the origin of our ideas of the sublime and beautiful" in Ashfield, ed. and Bolla, ed. *The Sublime: A reader in British Eighteenth-Century Aesthetic Theory,* 1996, pp. 131-144.
[32] Ibid.

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something we do not understand, but which we know has greater power than us[33].

Kant, who wrote his treatise on the sublime after Edmund Burke[34], adopted many of Burke's ideas, most notably the notion of the sublime as containing immense power in and of itself. This notion of power is in many ways what positions the sublime as a concept belonging to reason, as we do not only judge the sublime as powerful, but rationalise that it is more powerful than the observer[35]. Lyotard in turn adopts Kant's notion of the sublime as belonging to reason, which belongs to the realm of cognitive thought, rather than understanding which belongs to the realm of beauty. Lyotard further proposes that both beauty and the sublime are sub-groupings of aesthetics and that when one considers them as such the sought after bridge between cognitive thought and immediate bodily senses becomes readily available[36]. Furthermore, Lyotard states that aesthetics is the prime force in modern thought, and is in turn the basis on which the post-modern is formed[37]. This feeling of surpassing Cartesian dualism by uniting the body and the mind in aesthetic appreciation of beauty, power, terror and greatness becomes the ultimate and truly sublime moment, surpassing moral Judgment. This truly sublime moment not just beckons but forces us to participate in contemplation of the sheer greatness of the subject before us.

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[33] Burke. "A philosophical enquiry into the origin of our ideas of the sublime and beautiful" in Ashfield, ed. and Bolla, ed. *The Sublime: A reader in British Eighteenth-Century Aesthetic Theory,* 1996, pp. 131-144.

[34] Burke wrote his treatise in 1759 and Kant in 1764.

[35] Kant. *Critique of Judgment*, 1951, Chapter Five.

[36] Lyotard. *Lessons on the Analytic of the Sublime,* 1994.

[37] Ibid.

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> 'The judgements: 'That man is beautiful' and 'He is tall' do not purport to speak only for the judging subject, but like theoretical judgements, they demand the assent of everyone' (95; *92*).
>
> Our text, on the contrary, asserts that sublime feeling "lays claim also to universal participation" (*macht zwar auch auf allgemeine Teilnehmung Anspruch*: 149;*143*), but this *call* cannot be immediate in the same way as it is in taste. The demand for universality that is proper to the sublime passes "through [*vermittelst*] the moral law [*des moralischen Gesetzes*]" (ibid.). The pleasure in the sublime is said to be a pleasure "of rationalizing contemplation" (*als Lust der vernünftelnden Kontemplation*), the pleasure that we have in contemplating while reasoning (149; *142-43*).[38] [39]

For Lyotard the truly sublime then is experienced in two parts. First, the immediate pleasure or horror experienced when something is seen, heard, tasted, smelled and/or felt which may be great, but never as great as the second part, where it is *understood* and *reflected on*, and how it relates to the subject in terms of actual power and greatness.

It seems therefore that there are two separate forms of the sublime. The first represents a purely cognitive function, in which the viewer understands the terror or greatness, but without any prior sense of beauty or antipathy. Edmund Burke supplies the example of an enraged ox that derives its sublimity from its rapine and destructive qualities[40]. The bull in this example does not present the viewer with any particular beauty or ugliness nor does it necessarily present the viewer with noise, smell or taste. The bull is merely a representation of force that requires the viewer to contemplate it in order to appreciate its sublimity. The second form is an aesthetic one, in which the sublime is coupled with the

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[38] Lyotard. *Lessons on the Analytic of the Sublime,* 1994, p. 202.
[39] All the authors own references are referring to Kant's *Critique of Judgement.* The italic numbers refer to the original German edition, and the other numbers refer to the English translation mentioned above.
[40] Burke. "A philosophical enquiry into the origin of our ideas of the sublime and beautiful" in Ashfield, ed. and Bolla, ed. *The Sublime: A reader in British Eighteenth-Century Aesthetic Theory,* 1996, pp. 131-144 ( p. 83 in the original work).

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senses and thereby spans the gulf between sensation and contemplation[41]. This sensation of the sublime requires more from the spectator as it is a full body experience that includes first sensing, then passing Judgment, then understanding[42].

In this thesis I will argue that an obvious site of the sublime can be found in digital imagery. The digital image has an inherent greatness in the sense that it does not have to obey any physical rules; it is exempt from gravity and the limits of physical size or speed. In a very real sense it is greater than anything that can be found in the physical world simply because it is *not* physical. However, as Stephen Prince suggests, the digital image is often encoded with photo-realistic signifiers. This creates the illusion that the image is physically real: the digitally produced image seamlessly blends with the photographed image, thereby creating images that would otherwise have been impossible to achieve, but to the viewer presents a holistic filmic reality. As the digital special effects along with the photographed images "Reproduces the world in front of the lens"[43], the viewer on the other side of the screen sees and reacts only to the displayed image. To the viewer the displayed image represents the entire filmic reality and whether the filmic reality is digitally created or not does not matter unless the viewer is somehow initiated in the origin of the image. What does matter is that through the digital image *anything* is possible.

The nature of special effects is to transform the physical reality into an image that propels the narrative. This is in the nature of all special effects, not just

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[41] Lyotard. *Lessons on the Analytic of the Sublime*, 1994, p. 1.

[42] Schopenhauer has, previous to Lyotard, generated a classification of levels of the sublime, which will not be used in this thesis, as it deals exclusively with the understanding of the viewer's place within a Cartesian world and the viewers feeling of oneness with that same world. Schopenhauer. *The World as Will and Representation. Volume I*, 1819.

[43] Prince. "True lies: Perceptual Realism, Digital Images, and Film theory", in *Film Quarterly* Vol. 49, no. 3, spring 1996.

digital, and they can range from miniature models, actors hanging from wires to painted backdrops. The illusion of the cinema, then, is not born, nor does it end with digital imagery, but because of its nature, where every single pixel can be manipulated and controlled, the digital technology contains an unlimited potential to transform the viewed image. As Warren Buckland argues, because full control over the image is exercised the limits for digital imagery is infinite[44], and unlike photographed material, digital imagery is not reliant on an indexical referent, nor a physical object to establish a physical subject within the reality of the film. Therefore it can potentially be anything and show anything, existing or otherwise.

Burke argues that at the heart of the sublime lies terror. The power, as I have already mentioned, the image holds is by default rooted in terror, and nothing is more terrifying than infinity. Not only is the terror built into the narrative of a given film, but the very nature of the digital image is also a source of terror since the digital image can render the 'traditional' moviemaker obsolete. The digital image is terrifying not only because of its limitless nature, but because it is a signifier of the future-present of film.

Buckland argues that in *Jurassic Park* the digital images represent a modal future, a possible future, which the audience craves and responds to since it creates a framework for their own desires and fantasies to relate to[45]. He further argues that the digital image is exceptionally suited to portray modal futures since the 'modal reality' represents something that does not exist in physical form in our reality, but by exercising the full control of the digital image the

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[44] Buckland. "Between Science Fact and Science Fiction: Spielberg's Digital Dinosaurs, Possible Worlds and the New Aesthetic Realism" in Redmond, ed. *Liquid Metal: The Science Fiction Film Reader,* 2004, p. 28.
[45] Ibid., p. 32.

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future can be created before the eyes of the viewer and thereby it becomes real. After establishing the digital image as a conveyor of modal realities, Buckland turns to viewer appreciation of them. Here he relies on the psychoanalytical tools of ontological realism to explain the success of the modal world cinema by arguing that the viewer uses the foreignness of the digital image, sutured into the film, as a signifier of his or her own position as an all seeing master of the unfolding film[46]. Having created an ontological reality to suit his or her own needs, the viewer can then accept a filmic reality that is completely different from the physical reality.

Brooks Landon explains that "Science-fiction film, and indeed much – if not most – contemporary film, *has become technology on the way to somewhere else...*"[47]. He goes on to argue that the technology of digital special effects not only represents the future, but a future dominated and decided by technology. Both Landon and Brooks argue that technology represents the future. The modal reality of what is to come inherent in the digital image as a signifier of technology.

In order to understand the allure of computer generated images and to understand how technophobes and technophiles alike revel in the sublime that is derived from the digital images on screen, it must first be examined how the viewer understands the sublime. The driving force behind the sublime which is neither beauty nor ugliness, but terror and power must be recognised. Plain and simple. CGI gives one the ability to create vast worlds and destroy them in a single click of the mouse, the power to completely rule traditional filmmaking as

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[46] Buckland. "Between Science Fact and Science Fiction: Spielberg's Digital Dinosaurs, Possible Worlds and the New Aesthetic Realism" in Redmond, ed. *Liquid Metal: The Science Fiction Film Reader,* 2004, p. 29.
[47] Landon. "Diegetic or Digital? The Convergence of Science-Fiction Literature and Science-Fiction Film in Hypermedia", in Kuhn, ed. *Alien Zone II*, 1999, p. 37.

obsolete, or indeed the progress within an imagined digital evolution that eventually will lead to the hyperreal, the post-human, the future.

The power and the terror inherent in the digital image can be argued to stem from two major sources, namely the fear of technology that in the eyes of technophobes will lead to the death of cinema, and the idea of a digital evolution that will lead to post-human cinema in which actors are replaced with digital counterparts. These two sources of terror can be further divided into four sub-categories:

<div style="text-align:center">

**Fear of Technology**

Leads to

**Death of Cinema**


**Digital Evolution**

Leads to

**Post-Human Image**

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In the next two sub sections these two groupings will be further explained. Firstly, how the fear of digital technology inevitably involves a fear of the death of traditional cinema or indeed, the death of the real. Second, how the idea of digital evolution can lead to the death of the traditional actor, and by extension sublimates the terror of the post-human.

## *Death of Cinema*

The terror inherent in digital special effects, and digital imagery in general, stems at least partly from the already mentioned 'terror of complete control'

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exercised through the digital image. The complete control allows for an infinite variety of images created entirely by computer. Even if that power is still a ways from being harnessed, the potential that eventually complete control of all images will allow filmmakers to disregard actors and their abilities or lack of props, or scenery, remains an awe-inspiring one.

The power of the digital image, then, is, at least in part, founded in the prospect that ultimately the digital image can replace reel film completely. Several theorists has remarked and elaborated on this fear, such as Sean Redmond in his introduction to *Liquid Metal*[48] where Redmond remarks that the current academic work on digital special effects is dominated by apocalyptic attitudes towards the death of cinema prophesised by digital special effects.

> Or else science fiction is seen as one of the apocalyptic catalysts for real cinema's imminent death. So the argument runs, science fiction film fills the movie world with too many special effects and set-piece moments at the expense of narrative development or meaningful characterization, or so relies on CGI or the digital Aesthetic that reel film dies in the antiquated chemical process to which it clings to.[49]

This prospect of the death of classical cinema is naturally tied to the idea of total control of the digital image, in the sense that, or so it is feared/prophesised, it will one day become technologically advanced enough to completely mimic anything that can be filmed, and cheap enough to make it profitable to do so.

The technophobic fear being played out here concerns the deconstruction of traditional filmmaking and in their essay *Technophobia*[50] Michael Ryan and Douglas Kellner explains how technology has always been a threat to the status

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[48] Redmond, ed. *Liquid Metal: The Science Fiction Film Reader*, 2004, Introduction.
[49] Ibid.
[50] Ryan and Kellner. "Technophobia", in Kuhn, ed. *Alien Zone*, 1990.

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quo and the governing social authority[51]. The purpose for the conservative technophobes, according to Kellner and Ryan, is to depict all technology as containing an intrinsic evil. The arguement runs that in the very seed of technology lies our destruction.

For conservative technophobes the advancement of digital imagery has presented a new fear of science fiction becoming science fact. All of a sudden Bazin's theory of all pictures having an inherit link to the image photographed and giving them validity becomes false. The ingrown belief the viewer holds that the photographed represents truth, provides the viewer with a false sense of real, which minimises the effect of 'properly' filmed material. The technophobes argue that, when the 'unreal' image is indistinguishable from the 'real' image, the 'real' image looses its value and traditional cinema dies. Some filmmakers have joined this technophobic choir. For example Quentin Tarantino famously voiced his opinion in an interview with Empire Magazine:

> 'I watched Keanu fighting and I suddenly felt it,' said Tarantino. "You know, my guys are all real. There's no computer fucking around. I'm sick to death of all that crap. This is old school with fucking cameras. If I'd wanted all that computer game bullshit, I'd have gone home and stuck my dick in my Nintendo.
> This CGI bullshit is the death knell of cinema. Movies are far too fucking expensive at the moment and it's killing the fucking art form. The way it's going, in ten year's time it will officially be killed.[52]

Despite his usual passionate language Tarantino touches on something vital here in addition to the 'death of cinema' argument. He also sees the doom approaching in the form of cinema becoming like a computer game. The

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[51] Ryan and Kellner. "Technophobia", in Kuhn, ed. *Alien Zone*, 1990.
[52] Empire Magazine, November 2003.

correlation between computer generated images and computer games becomes an important one for a number of critics and viewers, since it is suggested that using computer generated images is tantamount to cheating. Filmmaking, according to Tarrantino and others, should be depicting something that despite all the trickery and props 'actually happened', whereas creating digital images moves filmmaking into the realm of make-believe. It is deviating from the tradition of stage magic into a world of 12 year-olds playing 'Mario Brothers'. The old adage of 'blood, sweat and tears' become 'geeks, chips and Coca-Cola'. The ancient fear of technology described by Ryan and Kellner[53] still prevails in this scenario as the conservative film makers and theorists dread the change in the art and craft of filmmaking. Making movies becomes like playing video games; actors are replaced by perfect copies of people that never existed; and landscapes become digitally manufactured to suit the film rather than represent a physical location. The entire art of filmmaking becomes 'simulacrum' in Baudrillard's definition or 'a copy without a model'[54].

   The terror and power of creating a film that one plays, is accentuated by the fact that currently the computer and processing capabilities needed to create digital films is reserved for studios with big budgets and expensive machinery. The argument further runs, that as digital filmmaking becomes able to copy actors and scenery so perfectly that no one can tell the difference between the physical and the digital, traditional and independent filmmaking "dies in the antiquated chemical process to which it clings to"[55].

   The irony of this scenario is that it is not the imagery on screen that is supposed to change into a digital spectacle, but instead computers become fully

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[53] Ryan and Kellner. "Technophobia", in Kuhn, ed. *Alien Zone*, 1990.
[54] Baudrillard. "The Ecstasy of Communication", in Foster, ed. *Postmodern Culture*s, 1985.
[55] Redmond, ed. *Liquid Metal: the Science Fiction Film Reader*, 2004, Introduction.

capable of mimicking physically filmed images. This seems to be contrary to the idea that technology, to the technophiles, is celebrated because of its wondrous foreignness. If the spectator cannot tell the difference between what could have been filmed by traditional means, and the digital image, the wonder of the digital image seems not only to diminish, but to become obsolete itself. In other words, the digital image needs to be seen *as* digital in order for it to have an impact on the viewer. This position is echoed by Steve Neale, who enunciates the need for science fiction films not just to show off the newest effects, but to also reveal that they *are* the newest[56].

When Steve Neale speaks of the moment in the special effect movies where it is emphasised that what you are looking at is the latest and greatest in special effects[57], he points out that the narrative is put on hold for the duration of the display of special effects. The need to accentuate special effects to that degree of course arises not only to give pause to an already image-saturated audience, but also because it isn't immediately apparent that what they are watching is *awe*some. The audience needs to be told where to be impressed because otherwise some of them would miss it altogether. The point of this is that the audience cannot be trusted to prefer computer generated images that look like 'real' images to just plain 'real' images because the spectacle of the technology only comes into play when the audience can distinguish that technology, and by the same token, the fear of technological advances only comes into play when the technology is disclosed either through the film itself or through press releases and interviews leading up to the film. Furthermore, this new technology fetish that according to the conservative film makers/theorists preludes the end

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[56] Neale. "You've Got To Be Fucking Kidding!' Knowledge, Belief and Judgement in Science fiction", in Kuhn, ed. *Alien Zone*, 1990.
[57] Ibid.

of non-digital cinema has, according to Holly Willis, produced two groupings of filmmakers, namely the Gen X Filmmakers[58], which include Quentin Tarantino, who despise the new technology and are characterized by apathy, irony and disenfranchisement, and the independent filmmakers who embrace digital filmmaking to make DV films, which are both cheaper and faster to produce[59]. According to Willis, the advancements in digital filmmaking has created or at least facilitated a greater diversity in modern filmmaking, and opened up new avenues for filmmakers in general. I would argue, then, that the idea of digital imagery being the 'death knell of cinema' seems to be counterintuitive and this sentiment seems to be echoed by Paul Arthur, who argues that the reason the fear of digital technology taking over commercial filmmaking can persist is because both filmmakers and Hollywood profit from these fears:

> It is entirely in the self-interest of commercial movies to capitalize on public fears of imminent catastrophe, to anathematise the spread of emerging technologies, and simultaneously to paint for itself a continuing role in a brave new world of image production.[60]

Technophobic fears may therefore not be grounded in facts and rational worries, but be a result of Hollywood's own maintaining of the public fears. The reason for Hollywood's maintaining those fears might be as simple as 'fear fills seats and nerds watch a lot of movies'. However, the fear that one day Hollywood and indeed all filmmaking will be digital and therefore 'unreal' in the eyes of the

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[58] A term quoted by Willis and coined by Peter Hanson. She does not list him in her bibliography however.
[59] Willis. New Digital Cinema: Reinventing the Moving Image, 2005.
[60] Arthur. "The Four Last Things: History, Technology, Hollywood, Apocalypse" in Lewis, ed. *The End of Cinema as We Know It: American Film in the Nineties,* 2001.

technophobes still persists. It remains a source of great terror and power in the contemplation of the digital image.

This leads to the second source of terror and power inherent in the digital image, namely the terror of the post-human generated by the belief that there is a digital evolution that will eventually lead to the termination of the filmic subject.

## The Terror of the Post-Human

One can chart a history of the digital image in terms of evolutionary progress. This linear trajectory maps the computer generated images from their beginnings in *Tron*[61] in 1982. However they only became viable and, for some, frightingly real in 1987 when Pixar released its second completely animated short film called *Red's Dream*[62]. The story was fairly simple. A unicycle is for sale in a bike shop. It is unwanted and is wearing the label '50% off'. The unicycle dreams of being part of a fabulous clown routine, with a character named 'Lumpy the Clown'. In the end the unicycle has to abandon its dream and return to reality as an unwanted unicycle in a world full of two-wheelers. The narrative is neither unique nor complex. What sets this movie apart is the fact that it is completely digitally animated. It is set at night, which had hitherto been impossible to do digitally *and* it features the first organic character to be digitally rendered in Lumpy the Clown. An organic character means one with parts that are not static but rather moves in relation to each other such as a smile that affects the motion of the cheeks. Previous to this, characters had to have

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[61] *Tron*, directed by Steven Lisberger, 1982.
[62] *Red's Dream,* directed by John Lasseter, 1987.

completely static parts, such as the armoured knight in *Young Sherlock Holmes*[63] or the spaceships in *The Last Starfighter*[64]. Even earlier only an entirely static environment could be digitally created, as they were in Disney's *Tron* in 1982[65], where the 3-D digital filmmaking took its beginnings[66].

Two years after Pixar's release of *Red's Dream* James Cameron and 20th Century Fox released *The Abyss*[67]. Using the same technology for 3-D imagery[68] they had created and displayed in *Red's Dream,* Pixar produced a watery creature later dubbed the Pseudopod. In *The Abyss* the creature interacts with the rest of the cast, and dubs their facial expressions and the characters in the film touch it. The movie has since then been celebrated as a milestone in the history of computer generated images, as the first feature film with an organic digitally created creature.

When Cameron and Pixar[69] two years later released *Terminator 2: Judgment Day (T2)*[70] it was specifically marketed as containing the digital technology from *The Abyss,* perfected to create the 'liquid metal' featured in *T2*. In *The Abyss* the digitally created organic texture only had a vague resemblance to the people it mimicked, and to create a convincing humanoid shape was at that time impossible. This hurdle had been overcome by the time *T2* was made, and a robot from the future, made from 'liquid metal' had become a filmic reality.

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[63] *Young Sherlock Holmes*, directed by Barry Levinson, 1985.
[64] *The Last Starfighter*, directed by Nick Castle, 1984.
[65] *Tron*, directed by Steven Lisberger, 1982.
[66] 2-D digital images had been used as far back as 1973 in the movie *Westworld*, directed by Michael Crichton, 1973.
[67] *The Abyss*, directed by James Cameron, 1989.
[68] The creature was created by Industrial Light and Magic (ILM) which is a part of Lucasfilm, and the computer graphics department of ILM is what later became Pixar.
[69] Still under the name of Industrial Light and Magic (ILM).
[70] *Terminator 2: Judgment Day*, directed by James Cameron, 1991.

A little more than a year after *T2* was released, Spielberg completely changed the limits of what is possible to do with CGI when he released *Jurassic Park*[71] in 1993. Full size dinosaurs were walking and interacting with the human actors.

Warren Buckland explains that following the release of *Jurassic Park* the media speculated on the possibility of cloning dinosaurs and this debate gave rise to a new wave of 'modal logic' theory[72]:

> Modal logic studies the range of possible – that is, non-actual – state of affairs that emerge from an actual state of affairs. These possible states of affairs have a different ontological status, or mode of being, to the actual state of affairs. Possible worlds form part of the actual world but have a different ontological status to the actual world.[73]

Buckland argues that *Jurassic Park* pioneered what he calls 'composite cinema' where digital images and 'actual' images work seamlessly together. This composite cinema has allowed for modal logic to find a mediator in film, namely digital special effects. It is now possible to show something that does not exist in the physical world, or in Buckland's words create the "...deception that the composited [live action and animation] events do occupy the same diegesis"[74]. I would further argue that one of the possible states of affairs, or modal logics that Buckland mentions would be the digital creation of live action actors. A fully digital actor, forewarning the end of conventional filmmaking as either a dystopian or utopian future depending on the viewer, but a modal future all the same. Computer generated imagery had at this point already exceeded the

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[71] *Jurassic Park*, directed by Steven Spielberg, 1993.
[72] Buckland. "Between Science Fact and Science Fiction: Spielberg's Digital Dinosaurs, Possible Worlds and the New Aesthetic Realism", in Redmond, ed. *Liquid Metal: The Science Fiction Film Reader,* 2004.
[73] Ibid., p. 25.
[74] Ibid., p. 29.

expectations of technological advancement and the question became 'where do we go from here?' What was the next step in this digital storyline, and when would we see actors replaced by digital specimens?

Aylish Wood calls this evolutionary narrative an expansion of the narrative space available to filmmakers[75]. The digitally laden film now takes part in an expanded, or indeed, separate narrative that can add suspense or even pathos to a scene by adding newly developed digital images. Buckland and Wood, then, are referring to what I choose to characterize as 'the digital narrative'. I choose this definition over the more conservative 'technological narrative' specifically because of the tension inherent in digital special effects, such as the question of complete creative control already mentioned, and the idea of an evolutionary narrative. By referring to the digital narrative or the evolution of special effects, the filmmaker is catering to an additional audience of technological connoisseurs since this audience will often be the same that are interested in science fiction cinema. The effect of the digital narrative can best be seen in non-science fiction pictures such as *Titanic*[76], which is marketed as both a love story and as a lynchpin in contemporary technological advancement in digital special effects[77], as Aylish Wood comments:

> In an ebullient sequence the special-ness of the ship, and the special-ness of the digital effects come together in a double articulation of technological prowess.[78]

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[75] Wood "Expanded narrative Space: *Titanic* and CGI Technology", in Woods ed. and Street, ed. *The Titanic in Myth and Memory: Representations in Visual and Literary,* 2004.
[76] *Titanic*, directed by James Cameron, 1997.
[77] Wood "Expanded narrative Space: *Titanic* and CGI Technology", in Woods ed. and Street, ed. *The Titanic in Myth and Memory: Representations in Visual and Literary,* 2004.
[78] Ibid., p. 228.

In *Special Effects: Still in Search of Wonder* Michelle Pierson suggests that digital imaging has returned film to the cinema of attractions, making cinema more about spectacle than narrative. This form of exhibitionist storytelling originated in early cinema prior to circa 1906[79]. According to Tom Gunning[80], who has done the most extensive work on the cinema of attractions, it is most evident in some genres such as the musical, where images are beautifully composed for aesthetic purposes rather than a believable narrative. According to Pierson, science fiction also leans heavily on the cinema of attractions which is evident from the suspension of the main narrative to show off the special effects in a spectacular image, which is what Neale, as mentioned in the previous sub-chapter, also alludes to. Science fiction cinema, prior to computer generated imaging such as *Star Wars[81], 2001: A Space Odyssey[82]* and *The Thing*[83] all make use of the suspension of the main narrative to show off their special effects accompanied by grand orchestral music, or in the case of *The Thing*, the famous line: "You've got to be fucking kidding me!"[84] thereby using the spectacle of technological achievement to accompany the narratives of the films.

However, in the age of computer generated images the spectacle of technological achievement has attained a further evolutionary aspect apart from the obvious aspect of technological progress. In representational terms, unlike the traditional mechanical and optical special effects which has its origins with the beginning of stage magic and is limited by the laws of physics, digital

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[79] Pierson. *Special Effects: Still in Search of Wonder*, 2002, p. 118.
[80] Gunning. "The Cinema of Attractions: Early Film, Its Spectator and the Avant-Garde", in Elsaesser, ed. *Early Film: Space, Frame, Narrative*, 1990 .
[81] *Star Wars*, directed by George Lucas, 1977.
[82] *2001: A Space odyssey*, directed by Stanley Kubrick, 1968.
[83] *The Thing*, directed by John Carpenter, 1982.
[84] Ibid.

special effects have a very clear beginning with the invention of digital imaging and an obvious culmination with the total and unnoticeable digital creation of cast, crew and camera; a complete digital simulation. Digital imagery is also inherently different from any physical special effects since it does not have to adhere to any physical laws, or have any physicality whatsoever. Brooks Landon calls this long debated and –explored discourse "science fiction thinking"[85] and Michelle Pierson calls it a "technoscientific adventure"[86]. There seems, then, to exist a separate digital narrative, which has become a part of modern cinema, an evolutionary discourse that digital images represent a technology that in the long term can not only render traditional filmmaking obsolete but also by extension create the post-human actor.

Since the early days of cinema narratives has explored the idea of the post-human, and technological progress has been depicted as unavoidably leading to our own destruction. In Fritz Lang's *Metropolis*[87] the scientist Rotwang exclaims, that because of his robot "we have no further use for living workers" and throughout cinema history and in particular science fiction films, the idea of the android, or the post-human robot has been explored as a natural source of terror. In most of these movies an extremely vocal technophobia presides and the creation will inevitably turn on its master (eg. *Frankenstein*, the *Terminator* series, *Blade Runner*)[88] and through these movies the audience is warned of the dangers of technology. These dystopian scenarios are not so far removed from the terror of the post-human actor, which, in a purely cinematic sense, will lead to the destruction of mankind by its own creation. Actors and props will vanish

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[85] Landon. *The Aesthetics of Ambivalence: Re-thinking Science Fiction Film in the Age of Electronic (Re)production*, 1992.
[86] Pierson. *Special Effects: Still in Search of Wonder*, 2002, page 120.
[87] *Metropolis*, directed by Fritz Lang, 1927.
[88] *Frankenstein*, directed by James Whale 1931, and *Blade Runner*, directed by Ridley Scott, 1988.

in a whirlwind of digital development and a post-human era of filmmaking will commence. In this scenario, digital actors become what Baudrillard terms simulacrum[89], post-human in form and post-modern in context. Each movie becomes its own site of rules and representations, and physical laws no longer apply. Film becomes a representation of a world that never existed, the physical world rejected as obsolete, which creates a sublime terror in the hearts of technophobes. Technophiles, on the other hand, will embrace the same theory as possibly frightening, but also thrilling. To them it will represent a new post-human filmic era that prophesise awe-inspiring change rather than destruction, and the ecstasy of the human race re-born in digital splendour.

This second source of terror and power can be dubbed the 'terror of the post-human' and together with the 'death of cinema' it represents the major inherent terrors in the digital image. To understand how the terrors work, the basic principles of these theories must first be understood. It is therefore necessary to define the parameters of the thesis. Digital special effects will be clearly defined as different from physical special effects. The digital narrative mentioned in this chapter will be clarified and separated from other narratives to clarify the framework of the filmic narrative as a whole. Furthermore, the digital image contains a tension between fact and fiction, real and unreal, which dominates much of the scholarly debate. This tension will be addressed and the viewers' perception of what constitutes reality will be examined. Finally as Baudrillard's theory of simulacrum is an integrated part of the terror behind the sublime, the post-modern condition and its effects on the audience will also be addressed.

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[89] Baudrillard. "The Ecstasy of Communication", in Foster, ed. *Postmodern Culture*s, 1985.

# **Chapter Two**

### *Creating the Digitised World*

In order to fully understand how digital special effects and computer generated images (CGI) vary from other special effects I have divided special effects into three groups. These groups are: Mechanical Special Effects, Optical Special Effects and Digital Special Effects.

Mechanical special effects would be any special effect that requires a physical agent that interacts with the actors and/or scenery being filmed. These include models, explosions, wires, props and so forth. An example of a mechanical special effect would be the explosion of the Cyberdyne Cooperation in *Terminator 2: Judgment Day*, where an extra level was built in plywood onto an existing warehouse and then detonated in order to create the illusion of a real building exploding[90].

Optical special effects would include mattes and other painted scenery, fades, mirror images, dissolves or any effect that interferes with the physical reel of film. An example of a matte would be green screen effects used in *The Matrix* in order to allow 'outdoor' fighting scenes to be filmed inside a studio by projecting the scenery onto the green screen in post production.

Digital special effects include any effect that has been digitally produced and then projected onto the film, either as a composite with physically filmed material or as a completely digital creation. Since I am using only the

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[90] "No Feat But What We Make" *Terminator 2: Judgement Day Extreme Edition*, DVD, Directed by James Cameron, 1991.

active/visible digital special effects that will be further explained later in this chapter, I will use the following definition. Digital, active, special effects are computer generated images (CGI) that interact directly with the subjects or action on screen.

However, for the audience to participate in the digital narrative, and through that experience the sublime they must first comprehend that the effects *are* digital. In order to further understand how the audience experiences the digital sublime, the distinction between *active* and *passive* effects has to be made. Warren Buckland calls this distinction *visible* and *invisible* special effects[91]. However, Buckland's distinction suggests that special effects in general are visible, but I would suggest that special effects can be a seamless part of the film narrative as well as a spectacle that draws attention. For example, CGI can certainly invoke a sense of spectacle and awe which may arrest the narrative, such as a large scale explosion. I would argue that the spectacle and awe is caused, at least in part, by the sense of reality – the sense that in the filmic reality this *really* happened. In other words, the spectator does not necessarily understand the special effect as being something outside the rest of the narrative, but instead sees it as an intricate part of it. I choose, therefore, to label this difference as the *active/passive* dichotomy, as it refers to their relationship with the narrative and not to their recognisability as special effects. Active effects propel the narrative or the spectacle on the screen, or indeed are a spectacle in their own right, while passive effects appear as part of the background, supposedly invisible or at least indistinguishable from the normal background in the eyes of the viewer. A good example of this is the Harrier Jet that was visible

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[91] Buckland. "Between Science Fact and Science Fiction: Spielberg's Digital Dinosaurs, Possible Worlds and the New Aesthetic Realism", in Redmond, ed. *Liquid Metal: The Science Fiction Film Reader*, 2004.

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in the background of *True Lies*[92] but was later digitally removed and replaced with digitally created trees and bushes. Another example would be the waves in *Titanic*[93] that were made to appear as 'normal' waves.

To better understand this definition of special effects I have created the following model:

| Name (Method of creation) | Active | Passive |
|---|---|---|
| **Mechanical** (Tactile) | Miniatures, Explosions | Covering modern scenery with trees or bushes *(e.g. Epic drama)* |
| **Optical** (Tactile) | Shuftan Process | Painted backdrops, mattes |
| **Digital** (Digital) | Digitally animated characters *(e.g. Dinosaurs in Jurassic Park)* | Waves or other moving scenery *(e.g. Titanic)* |

**Model 1: Classification of special effects**

Few theorists have established a clear definition of what constitutes special effects or when something becomes a special effect. Film is at its heart a special effect, an illusion of light projecting artificial movement onto a static screen. This places the very essence of film at the origins of special effects. Film is the art of stage magic in a new medium. Illusion and deception lie at the heart of special effects, just as they lie at the heart of film itself. Tellotte calls this alchemy the 'tradition of trickery'[94]. He suggests that the success of special effect driven film is based upon a historical need for the audience to be tricked – to believe that the trickery is true, or at least can be true, in the sense that what

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[92] *True Lies*, directed by James Cameron, 1994.
[93] *Titanic*, directed by James Cameron, 1997.
[94] Tellotte. *Science Fiction Film*s, 2001.

they are taking part in is a celebration of the show and tell. The effects and in turn the films represent reality to the audience, and become mirrors of the world, no matter how otherworldly the narrative of the film seems.

> When we watch a science fiction film, we see as well a narrative about the movies themselves – about how our technology can impact on our humanity, how our technology (and, indeed, our very rationality) impinges on our world, how our technology might point beyond our normal sense of reality. More specifically, the genre to a degree almost inevitably seems to be *about* the movies precisely because of the way in which its reliance on special effects implicates both the technology of the film and the typical concern of most popular narratives with achieving a transparent realism.[95]

To make images on the screen represent an alternative physical reality, and thereby make the audience believe they are watching that alternative reality, is the very essence of the cinema, and in turn becomes the spectacle of the image as the image becomes a representative of a fantastic reality. That spectacle is at the very heart of the *active* special effects mentioned in the Model 1[96]. Since this thesis deals with the relationship between cinema and viewer, I will exclusively be dealing with active special effects, and in turn the spectacle of the image. Further I will make a distinction between digital special effects and what I choose to call *tactile* special effects, namely mechanical and optical special effects. The reason for this distinction is the historical and perceptual differences between the two groups. Even though digital special effects basically belong to the same history and tradition as tactile special effects, they have a much more clearly defined separate history. As an overall part of special effects, CGI partake in the general history of special effects, but additionally have a separate

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[95] Tellotte. *Science Fiction Films*, 2001.
[96] See p. 32.

trajectory as they evolved relatively recently with the invention of processing powers capable of producing digital imaging. Furthermore, as the technology evolves, CGI has become an agent of post-human cinema, hence the evolutionary idea that is linked to the digital image. The history of tactile special effects, on the other hand, is directly linked to stage magic and dates back at least several hundred years, unlike CGI which is only indirectly linked through its status as special effect. What unites the different types of active special effects, and indeed defines them, is the spectacle of something aside from what would otherwise be possible, and what Michelle Pierson, drawing on Kant's definition calls the 'sublime', the feeling of experiencing something that exceeds the imagination and captures the forces of science and technology[97]. Scott Bukatman calls this feeling a *tamed sublime* since the audience, by paying admission, knows they are about to see a spectacle. The viewers remain safely in their seats, while the projection takes them on a thrill ride through explosions and outer space. This is, in effect, no different from the days of stage magic, where outlandish scenes were displayed on set, and the audience finds reassurance in the fact that what they are watching is a supervised (by a magician or the screen) spectacle, but the pleasure is derived from responding to this spectacle as if it was real, and this is where the feeling of the sublime derives from[98]. The sublime then is at the heart of the special effects, the power and the terror of spectacle and technology; this feeling of the sublime is crucial to fully appreciate the spectacle of the image.

The history of special effects in general and the digital special effect in particular is the grounding for the power and terror inherent in the digital image,

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[97] Pierson. *Special Effects: Still in Search of Wonder*, 2002, p. 23.
[98] Bukatman. "The Artificial Infinite: On Special Effects and the sublime", Kuhn, ed. *Alien Zone II*, 1999.

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and this history is important in understanding why both magic and technology play such a crucial role in the understanding of special effects.

## *Abra Cadabra – Special Effect Magic*

The trajectory of special effects is inherently connected to the power and terror specific to the sublime. Special effects are agents of an alternative reality that has no rules or safeguards. Partly this happens because special effects are designed to allow what would otherwise be impossible, and they ignore the laws and rules that normally govern. In this sense special effects are much alike a magic trick, which is not coincidental as traditional special effects are based on the conjuring traditions of stage magic, and film special effects are basically an aesthetic 'engineering' tool employed to make the viewer believe in the textures, inventions, and spaces of the fictional world that emerge before their eyes. All film special effects are in effect principally technologically enhanced illusions and misdirection; sleight of hand and smoke and mirrors. As Erik Barnouw explains:

> Most technical devices that became characteristic of motion picture special effects – dissolves, fades, substitutions, double exposures, superimposures, masking, models, rear projections, mirrored images – were familiar to the first film magicians from a century of scientific magic.[99]

Barnouw, whose seminal work *The Magician and the Cinema* has inspired the work of several film theorists, such as the already mentioned Michelle Pierson,

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[99] Barnouw. *The Magician and the Cinema*, 1981.

to examine the correlation between special effects and cinema[100], further explains that the stage magic tradition not only allowed early movie makers to make use of some redundancy when selling their new medium, but that the tradition of technological magic has carried through to modern film as well. However, since film is by its very nature a special effect, namely the illusion of movement within time and space, the magic related special effects create a double articulation within or between the frames that are, in their own right, a magic trick. J.P. Telotte notes that this creates an attractive tension within the film, as well as between the filmic- and the outside reality. This tension is by no means exclusive to modern cinema, but has been an integral part of cinema ever since the first images appeared on the silver screen. When speaking about Miélè, who was himself a magician, Telotte notes:

> In fact, we might say that it is precisely the tension between such seemingly magical effects and the desire to make those elements neatly "fit" into a reality illusion that is the core of his films' appeal – and, indeed, that of the entire science fiction genre.[101]

As Telotte states, the audiences know they are watching an illusion, they know what they are watching is not 'real', it can't be real, and yet – there it is. Now this can be said to be true of every frame of the film, or the "reality illusion" Telotte mentions[102], however I will focus on the special effects that create the magic within this reality illusion. And just like the audiences at magic shows the audiences in movie theatres are also trying to decipher the 'trick' – looking for the 'secret compartment in the hat' so to speak, or in terms of CGI, looking for telltale signs that the digital image is 'fake'. At the same time, however, the

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[100] Pierson. *Special Effects: Still in Search of Wonder*, 2002, p. 17.
[101] Tellotte. *Science Fiction Films*, 2001, p. 25.
[102] Ibid., p. 25.

audience is accepting the illusion and trying to fit it into their vision of the world. From the art of stage magic to the art of digital imagery, the 'secret of the trick' is a key element of the attraction. Baudrillard states that the secret is the most powerful seducer, arguing that as soon as the secret becomes known the spell is broken and "...there is nothing seductive about truth"[103]. The audience of both the the magic show and the digital image believe they crave the truth of the trick, yet according to Baudrillard, what they really crave is the seduction of the secret.

Eric Barnouw explains in *The Magician and the Cinema*[104] how closely related stage magic and cinema are, and how, in the early years, filmmakers used stage magic to play with filmic reality. Mirrors, props and even sleight of hand and shadowmagic were commonplace effects in early cinema[105]. The acts from the stage were performed on screen, and well known tricks became part of early cinema. Méliès used optical illusions, such as painted glass in front of the camera lens, in many of his more than 500 films[106]. Félicien Trewey became famous for showing shadowmagic on film while stories that accompanied them were read live from a script[107], and David Devant made a living out of selling 'animated photographs' of himself doing magic[108]. Slowly new magic acts evolved that were specifically made for, and only worked on, film.

Generally accepted as the first such special effect specifically made for film is a stop-motion technique found in the one minute film *The Execution of Mary*

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[103] Baudrillard. *The Ecstasy of Communication*, 1988, p. 64.
[104] Barnouw. *The Magician and the Cinema*, 1981.
[105] Ibid., particularly pp. 45-78.
[106] Ibid., pp. 46-8.
[107] Ibid., pp. 50-4.
[108] Ibid., pp. 54-8.

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*Stuart*[109]. In this one shot tableaux, the actor playing Mary is replaced by a dummy just as the executioners axe is coming down. This effect was achieved by making all the actors stand completely still while the dummy was brought in and the actor playing Mary left. This had never been done before and could not be done live.

Since then special effects evolved with the optic and technological capabilities of film. One key example of this type of optical illusion is the Shuftan Process where actors stand off camera and are reflected in a mirror right in front of the camera standing in front of miniatures, making the miniatures look like real buildings[110]. This tactile and optical technique was created for, and most famously used in *Metropolis*[111]. It was, however, widely used through the first half of the 20th century until it was replaced by blue screen or matte effects. These achieved the same illusion of the setting being larger or different, but blue screen or matte effects also allow the camera to move. The traditional matte effect is created by having the actors perform in front of a painted backdrop, which allow for shots of a static cityscape, or vast rolling hills to be filmed in a studio. Blue screen effects are also referred to as 'travelling matte'[112] and are achieved by actors performing in front of a blue screen, and then later, in the editing process, the colour blue is then exchanged for a second moving image giving the illusion that the actors are performing within that second image. Actors performing in front of a canvas, on which a film is projected from the rear is another example of travelling matte. Both these techniques allow for outdoor scenes with a dynamic background, such as waves or a bustling city, to

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[109] *The Execution of Mary Stuart*, directed by Alfred Clark, 1895.
[110] Rickitt. *Special Effects: The History and Technique*, 2000, p. 19.
[111] *Metropolis*, directed by Fritz Lang, 1927.
[112] Rickitt. *Special Effects: The History and Technique*, 2000, pp. 44-7.

be filmed in a studio. In many ways the optical, but still tactile, illusion is the ancestor to digital special effects, as they represented the first attempts to integrate a second medium (backdrop, rear projection, mirrors) into the illusion of the moving image.

The magic of cinema unshackled itself from traditional stage magic in another groundbreaking way. It was no longer necessarily tied to a person, the magician. The magic of the screen became an act in and of itself. Magic without a magician or rather, the technology *became* the magician. James Cameron, one of the foremost directors using and experimenting with new CGI such as the pseudopod in *The Abyss*, the liquid metal in *T2: Judgment Day* and the ship and waves in *Titanic*, quoted Arthur C. Clarke stating that "...sufficiently advanced technology is indistinguishable from magic"[113]. He further explained that is how it is supposed to be for the audience[114]. Technology, or in this case CGI *is* magic.

So, gone were stage magic tricks such as diversion of attention and the physical limitations of the stage. Special effects changed from being a tool of the magician, to being a tool of the film itself. It became a way of achieving fantastic images that would entice the audience by the sheer force of their foreignness. Cinema became less about telling stories and more about displaying fantastic images, as Gunning explains in *The Cinema of Attractions*[115].

What would under normal circumstances be impossible or extremely expensive became possible by means of miniatures, optical illusions or other special effects. Grand scenes and images that awed and inspired the viewing audiences could be made fairly cheaply by means of special effects. As science

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[113] Cameron, "Effects Scene: Technology and Magic", Quoted in Pierson, *Special Effects: Still in Search of Wonder*, 2002, p. 48.
[114] Ibid.
[115] Gunning, "The Cinema of Attractions: Early Film, Its Spectator and the Avant-Garde", in Elsaesser, ed. *Early Film: Space, Frame, Narrative*, 1990.

fiction and fantasy evolved as unique genres, special effects found a natural playground, and the development of special effects became a narrative in itself, rooted in the movies that displayed them. According to Neale, this process of movies addressing that viewers', to let them know that they are watching cutting-edge special effects is both a intertextual event in the film, and an institutional event in what Neale labels the "regime of special effects"[116]. That regime, which had been purely analogue up until the mid 1980s, took on a digital aspect, when a completely new form of special effect reached the silver screen, namely the digital special effect. Computers had become so small and powerful that convincing moving images could be created directly in them. This created a whole new medium in the domain of special effects and changed the entire nature of the capabilities of them.

The arc of digital special effects history can be described as the digital narrative mentioned earlier, which works on several levels of narrative. Therefore, in order to fully comprehend the audience experience of the digital narrative and the way any narrative works in relation to the audience, the following section will explore the nature of the narrative as it relates to the viewer.

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[116] Neale. "You've Got To Be Fucking Kidding!' knowledge, Belief and Judgement in Science fiction", in Kuhn, ed. *Alien Zone*, 1990.

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## *Storytelling by the Digital Campfire*

Storytelling is a way of creatively making sense of the world. It is re-arranging facts and feelings into a framework to create a sense of understanding or purpose. Whether reading Roland Barthes, Vladimir Propp, Stuart Hall or Claude Levi-Strauss, it is given that in any culture storytelling will be present as an integrated part of that culture in the form of films, legends, myths, rituals, jokes, songs, folk-tales and many other of a very large number of storytelling representations. Graeme Turner explains that when exploring the basic nature of storytelling: "It seems that story-telling is part of our cultural experience, inseparable from and intrinsic to it"[117]. This however does not explain how storytelling becomes a fully fledged narrative. How, in a storytelling culture, facts and codes are arranged in a framework of, for example, fairytales and legends.

Structuralists such as Propp and at least in part, Levi-Strauss argue, that in any culture narrative organizes itself in a framework which then defines its nature. They argue that human understanding of the world naturally leads to a structure and within that structure there are certain functions and dichotomies. In *The Morphology of the Folktale* Propp identifies 31 such functions divided into seven 'spheres of action'[118], many of these are clustered into pairs of dichotomies such as hero/villain or interdiction/violation and it would seem that in order for a structured narrative to exist there must also exist at least one dichotomy. Levi-Strauss calls these dichotomies 'binary oppositions'[119]. Raymond Bellour explains that any narrative organizes itself in terms of

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[117] Turner. *Film as Social Practice, 3rd Edition*, 2002.
[118] Propp. *The Morphology of the Folktale*, 1968.
[119] Quoted in Turner, *Film as Social Practice 3rd Edition*, 2002.

'sameness and difference'[120]. Whatever term is chosen, the fact remains that a fundamental way of creating and understanding narrative is by defining that narrative and the players in it, at least in part, by what they are *not*. To every hero there is a villain, and for any equilibrium awaits disruption.

The audience perception of CGI can be said to work from this very principle of the audience knowing, as they enter the movie theatre, that what they are about to see is at least in a physical sense unreal. To some extent even while they are experiencing the effect they can reflect that the images on screen do not pertain to their own physical reality. However, at the same time all the images are part of the world and the narrative *of the screen*, and if the narrative facilitates the spectator to be swept up and included in the text, the images then achieve the narrative reality of the movie, and by extension, special effects achieve the same narrational reality. Michelle Pierson makes this point several times in her book *Special Effects: Still in Search of Wonder*[121]. She quotes Jean-Louis Comolli, Octave Mannoni and Christian Metz for making the point that special effects while making the movies even more foreign to the viewer do not disqualify the viewers from projecting themselves into the movies. In particular she states that according to Metz "...the audience knows very well that the impression of reality cinema is capable of producing is in fact fiction, but they choose to believe in these fictions all the same"[122].

This of course creates another dichotomy, and further more a tension between viewer and screen, namely the dichotomy of real/unreal. This tension was briefly explored in chapter 1.3 as inherent in the digitally created image. The

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[120]Bellour. "The Obvious and the Code" in *Screen*, 14(4) Winter 1974/75.
[121] Pierson. *Special Effects: Still in Search of Wonder*, 2002.
[122] Ibid., p. 103.

tension will be explored in greater depth in chapter 2.6 specifically regarding the audience perception of reality. From a narrative point of view, however, the most fundamental aspect of this dichotomy is that it creates a narrative relation *between* screen and audience. This narrative relation forces the viewer to position him or herself in relation to the film through the codes of storytelling. As Propp would argue, every tension and every dichotomy creates a narrative.

The dichotomies, then, allow for the creation of established frameworks within the narrative on the screen. These frameworks in turn extend themselves into genres and in turn sub-genres and thereby the dichotomies become even more influential since now, not only do they influence how we perceive Cartesian or physical reality, but also how we perceive narrative itself. Turner explains:

> In film, genre is a system of codes, conventions, and visual styles which enables an audience to determine rapidly and with some complexity the kind of narrative they are viewing.[123]

So by using these framing tools of codes, conventions and visual styles, and thereby creating a vast network of dichotomies, the audience is allowed to understand and extrapolate what appears on screen, thereby understanding the story being told as well as its place amongst other stories. Indeed as Stephen Heath suggests: "the narrative is the very triumph of framing"[124].

In modern cinema, the mixing of genres has become a powerful tool in the film narrative. The narrative, while technically keeping to the established conventions, is breaking them at the same time, or at least breaking the dichotomy of exclusionary representation. This breakdown of convention is

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[123] Turner. *Film as Social Practice 3rd Edition*, 2002, p. 97.
[124] Heath. *Questions of Cinema*, 1981, Quoted in Lapsley and Westlake. *Film Theory: An introduction*, P. 139.

what scholars such as Christopher Sharrett[125] characterise as post-modern cinema. By breaking down the social conventions of society or even displaying their lacks and fallacies, he suggests that the framework of film is being eroded and that contemporary American cinema is characterised by a complete collapse of representational narrative[126]. I would argue that such a nihilistic approach to post-modern narrative is at best one-sided, and that the post-modern narrative instead represents a change in the coding of the genres and a change in the framework, rather than its destruction or collapse. In the following chapter I will explore the post-modern condition. However as Sharrett correctly explains, a large part of post-modern cinema is breaking down and destroying the social conventions that hitherto have been a central character in framing a narrative[127], but I will suggest that it is not as much a *destruction of* narrative codes, but more importantly a *change in* narrative codes.

The post-modern condition, as will be explained, is not so much a destruction of morals as a change from morals to ethics, and while the codes and genres of cinema might change, the framework and the dichotomy of binary oppositions are continual. So when examining how audiences react to contemporary cinema it is important to know that these audiences are also agents of a post-modern culture, and that this culture is not necessarily based on the destruction of morals and codes, but instead represents a point of reference that is ever-changing. Therefore I would suggest that even though there has been a definite change in codes, not least of which is the destruction of social conventions in post-modern cinema, the framework of narrative persists and is still based on binary

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[125] Sharrett. "End of Story: The Collapse of Myth in Postmodern Narrative Film', in Lewis, ed. *The End of Cinema as We Know It: American Film in the Nineties*, 2002.
[126] Ibid, p. 330.
[127] Ibid.

oppositions and the exclusionary representation of defining characters, scenery and narrative by what it is not. If it is true that cinema reflects on, and affects the society it is made in, then the reverse can also be said to be true, that society reflects and affects contemporary cinema. Graeme Turner even states that the narrative exists *only* in the minds of the audience[128], making the audience a co-creator of the narrative, or in other words participating in the narrative between screen and viewer. This means that in order to fully appreciate the narrative one must also explore the cultures from which the audiences are assigning meaning to that narrative.

So when exploring the effect of CGI on the viewer it is extremely important to understand the technological advances and societal issues contemporary to the text it appears in. In the following subsection the nature of post-modern cinema and indeed the post-modern narrative will be explored.

## *Post-modern Images*

Lyotard makes an important observation when defining the post-modern as he states that it is not the society that has become post-modern, but culture[129]. The difference might seem like a semantic one, but upon further examination it proves significant in understanding the post-modern condition. In Lyotard's words we live in a post-industrial society with a post-modern culture. It is not, then, the society, the relations *surrounding* subjects, but the culture, the relations *between* subjects that becomes post-modern. The post-modern is therefore not the state of society, but the state of knowledge in a highly evolved culture. This

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[128] Turner. *Film as Social Practice 3$^{rd}$ Edition*, 2002, p. 106.
[129] Lyotard. *The Postmodern Condition: A Report on Knowledge*, 1979.

state of knowledge has changed the very nature of narratives, largely due to language games, as Lyotard states in the very first chapter of *The Postmodern Condition: A Report on Knowledge*[130]. Since the post-modern is a factor exclusive to relationships, the communication within those relationships become a lynchpin for the post-modern, and it further becomes paramount to understand how post-modern agents communicate; not just how they communicate with each other but with objects as well. The viewer, then, must enter into a relationship with the film, in order to understand it, and in this relationship the viewer can communicate with the film in a closed circuit, and actively make demands, reject or accept anything that happens on screen, or rather, anything the film communicates. To examine this relationship further, Lyotard's model of communication, which extrapolates on Wittgenstein's *language games,* is shown below:

| Sender | Referent | Receiver |
|---|---|---|
| 1) Knowing of the referent | 2) In relation to both sender and receiver | 3) Refuse or accept |
| 4) Authority | | 5) Re-act |
| 6) act/re-act | | |

**Model 2: Basic communication[131]**

The model explains that in order for any communication to take place, the sender of information must know the receiver of the message, or at least know of said receiver in the case of mass communication such as film, and further must have the authority to send the message. Also, the referent of the

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[130] Lyotard. *The Postmodern Condition: A Report on Knowledge*, 1979.
[131] Ibid.

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communication, in this case the images on screen, must have a relation to both sender and receiver for the message to have meaning, which creates the necessity for the viewer to enter into a relationship with the film. The receiver, or in the case of film, the viewer, must then refuse or accept the premise of the referent and react, and the original sender can then act or react on that response. This 'game' means that in post-modern communication an ongoing interaction between the agents exists on a continuous basis, even if the sender appears to remain static such as it is with a film reel.

The model explains that if any part of the *game* changes, then the entire game changes. This relates in a very direct way to CGI. CGI is at its core, before it takes its place in any form of interaction with a viewer, *form* and not content. It is a way of telling a narrative, rather than a narrative itself. However, during the interaction with the viewer, CGI *becomes* content as it takes its place in the meta-narrative of the film and thereby changes the 'game' between the film and the viewer, or as Marshall McLuhan would put it: the medium is the message[132]. McLuhan proposed that instead of the narrative told by a medium, the medium itself should be the focus of study, thereby becoming the narrative. McLuhan further introduced the concepts of *hot* and *cold* media[133], depending on their level of interaction, and that movies were a fairly *cold* medium. I would propose that this is far from the case today, and perhaps never was. Only through direct interaction with the movie, and participation in the language game that is the situation, can a movie be felt, or even truly experienced. However, McLuhan wrote his book in 1964 before the post-modern condition was a widely accepted theory, and when the relationship between viewer and movie was still

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[132] McLuhan. *Understanding Media: The Extensions of Man*, 1994.
[133] Ibid., pp. 22-33.

considered to be a one-way consumption of the movie by the viewer. Since then, with the understanding of the post-modern condition, the paradigm has changed somewhat and Jean Baudrillard explains this change in the paradigm of interaction as the shift from a *scene* to a *network*[134]. Baudrillard states that the way we interact with any object, person or media within the post-modern condition is best described as a network of mutual influence and consumption[135]. As the viewer enters into the network of mutual consumption and relationship with the narrative of the film, the medium heats up to use McLuhan's terms, to a degree where the entire experience changes with it. Projection is no longer an option, and the communication between film and audience is not an option, but from the very outset a language game. I would suggest, then, that in order to understand the viewer's relationship, not only to the movie, but more importantly, to the digital special effect, one must regard this relationship as a language game between several separate agents, working within the same network.

Baudrillard argues that agents of the network enter into the ecstasy of communication, and that ecstasy is obscene[136]; obscene because it is forced and they have no control in the matter, and therefore the audience is forced to interact with the narrative of the screen. The communication of information takes place through language games, and these language games become extremely important as a way to create rules and establish a reference point in a post-modern culture, especially since the very nature of the post-modern contains a nihilistic tendency to abandon structure and lexical connections

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[134] Baudrillard. "The Ecstasy of Communication", in Foster, ed. *Postmodern Culture*s, 1985.
[135] Ibid., p. 129.
[136] Baudrillard. *The Ecstasy of Communication*, 1988, p. 22.

between sciences as well as people[137]. Language games, then, are used to make sense of the world. They are needed in order to apply rules to a situation, because the denotative nature of rules mean that they are no longer proven, nor accepted, in and of themselves. However, because rules in their very nature are prescriptive, the language games have to devise meta-prescriptive rules to define themselves. The rules are made up in every different language game and therefore change the very nature of reality within the situation from language game to language game. In a scientific language game, for example, every argument would have to be logic, whereas, a religious language game would accept a dogmatic set of rules such as the Bible.

The frame of interaction, then, becomes simulacrum in Baudrillard's sense, a copy without a model, since the rules will often be copies of previous rules but as they no longer verify themselves the rules holds no authority except what is bestowed upon them by the participants in the given situation[138]. This means that even the language game itself has to be legitimised in any given situation, and has to make use of its own prescriptive rules to do so.

Abandonment of structure means that every situation is unique, and that all the rules of the situation must be defined within the situation, which is at the core of both Lyotard's and Habermas' definitions of the post-modern. In *Theory of Communicative Action*, Jurgen Habermas explains that in modernity the world according to the agents within was divided into a public and a private sphere and a sphere of public authority, and those spheres kept separate. However, in post-modernity, Habermas explains, the idea of the public sphere has changed its

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[137] Lyotard. *The Postmodern Explained to Children: Correspondence, 1982-1985*, 1992.
[138] Baudrillard. "The Ecstasy of Communication", in Foster, ed. *Postmodern Culture*s, 1985.

very nature[139]. Originally the public sphere was the space 'between' the private realm and the sphere of public authority[140]. The public sphere, which Lyotard refers to as *culture,* is defined by the relations between people. By the same token public authority is what Lyotard defines as society and the private sphere is defined by the autonomous individuals. By changing the nature of the public sphere, Habermas suggests that the idea of the autonomous individual has been abandoned, and the notion of the autonomous situation has been adopted instead[141]. The autonomous situation is then defined by the relationship between the given agents of any situation.

With regard to the digital image, and, indeed, the movie itself, this means that no longer can the audience be considered as a single agent, but rather must be regarded as autonomous individuals. Each member of the audience will have their own separate and unique experience and interaction with the film. And because the film itself, and even the digital image, becomes a separate interacting agent, it is not only the perception but the reality of the movie (or image) that becomes separate from interaction to interaction. The digital image on screen will interact with each viewer with a unique amount of authority granted by that viewer. Knowledge of the referent will also vary from agent to agent, thereby changing the film and its impact in *every* given relationship. This makes it virtually impossible to state with any kind of certainty whether a given scene will have the predicted impact on its viewer, while at the same time allowing the film and the images on screen to have an active role in the situation, thereby enhancing their *potential* impact.  I feel obliged to point out at this juncture that it is not, in fact, society or culture that has changed, but rather

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[139] Habermas. *Theory of Communicative Action*, 1981.
[140] Ibid.
[141] Habermas. *The Philosophical Discourse of Modernity: Twelve Lectures*, 1987.

our *perception* of the culture. It is very possible that the audience has always viewed films within a network-based language game, but it has never been understood or treated as such. The theory of the post modern condition is based on our perception of the world surrounding us and interacting with us, what Lyotard labels *the knowledge in the culture*[142] and what Baudrillard labels *the ecstasy of communication*[143]; simply put, a change of focus, rather than a change of content. This change of focus has led to a redefinition of the perceived relationship between film and viewer from a purely one-way communication to the network communication described above. The network communication takes place within a closed circuit situational communication with both an individual set of rules from situation to situation as well as a direct relationship between the agents of that situation. The digital image, then, takes place in a communicative matrix where the collection of dots and pixels correlate with the viewer's experience and understanding, both in regard to the narrative of the film and the goals and desires of the viewer.

The following will examine both the tension of 'reality' in the digital image; what constitutes reality and how reality is perceived. Both reality as it pertains to the situation of the cinema, and reality as it pertains to understanding and reaction within a post-modern culture.

## *Redefining the World*

The tension of 'reality' inherent in the digital image is based on the viewer's understanding of what it constitutes. The philosophical writings on reality are an

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[142] Lyotard. *The Postmodern Condition: A Report on Knowledge*, 1979.
[143] Baudrillard. *The Ecstasy of Communication*, 1988 and Baudrillard. "The Ecstasy of Communication", in Foster, ed. *Postmodern Culture*, 1985.

expansive body of work, and in order to understand how any given viewer structures the 'real' within a given situation and, in turn, how that pertains to the digital image, a few key concepts will be introduced, namely *Ontological Reality, Cartesian Realism* and *Epistemological Reality*. Further I will introduce the concept of *Situational Ontology*.

Ontological reality is a way of perceiving the world, and basically states that the world is objective and holds a given value of information and mass, that cannot change, only be reorganised. It is based on the Platonic school of thought[144], and is represented in the Cave Allegory[145], where Plato theorizes that people are like prisoners in a cave that can only watch the shadows of the world on the cave wall, as it is reflected by a fire. The world outside the cave is there and it is finite, but the prisoners can never truly see nor understand it. In other words, the world is objective, but we cannot conceive of it fully. In more modern philosophy ontology is most prominent in the works of Ludwig Wittgenstein and his *Tractatus Logico-Philosophicus*[146], which is comprised of seven statements, the first of which is "The world is all that is the case"[147]. Wittgenstein's works later inspired The Vienna Circle and the thought of *logical positivism* and the *verification principle* that states that once something has been verified as 'true' it will remain so, and can therefore be said to be 'fact'[148]. Other objects than those verified can exist, but they can only obtain the status of 'fact' when verified. Ontological Reality, then, very simplified, is the perception that there is an finite amount of reality in the world, and that everything needs to be

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[144] Some believes it pre-dates Plato by several hundred years, but that is irrelevant to this thesis.
[145] Plato. *The Republic (with Desmond lee)*, 2001.
[146] Wittgenstein. *Tractatus Logico-Philosophicus*, 2001.
[147] Ibid., p. 5.
[148] Most notably amongst logical positivists is Rudolph Carnap.

verified as having physical existence order to be 'fact'. Fears or emotions then, are not real in an ontological sense; only their subject can be real.

By the virtues of ontological reality CGI can never be perceived as truth in its own right. Even the ones and zeroes of binary code, which ultimately are the building blocks of digital imagery are, in reality, rather positive and negative magnetic charges, and can only be said to have reality as such. Even if a hardcopy or a printout is made of the digital image it will then only contain reality as such. The representation can never be said to be real.

Cartesian Realism has its roots in Descartes' meditations from 1637, where he states that there is a dichotomy between body and mind. The body is the agent of an ontological reality and has to decipher the sensory inputs from this ontological reality to the mind[149]. This means that anything that exists in the ontological world has to be sensed and deciphered. To feel a lump of wax tells us that we are holding a hard physical object, smelling it will tell us that what we are feeling smells sweet, and seeing it will tell us that it is yellow. When we are told that what we are holding is called wax, we can then decipher the parameters of wax in the future. However, when heated wax melts, and our knowledge of wax will therefore be ontologically wrong[150]. Even though the deciphering is not always correct, we must, according to Descartes, accept that we only have access to the world outside ourselves through our senses and that these senses can deceive us. Cartesian reality therefore consists of raw sensory data of an ontological world, or in other words, everything that can be physically sensed.

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[149] Descartes. *Discourse on Method and Meditations*, 2003.
[150] Ibid.

Unlike ontological realism and epistemological realism, which are ways of understanding the nature of the world, Cartesian realism is simply the *perception* of a physical world removed from beliefs and analysis. Everything that can be sensed, felt, smelt, heard, tasted and/or seen and deciphered as belonging to a physical world, then, is 'real' whereas emotions, fears or projections can never achieve this status.

This version of ontological realism is more useful when debating the reality of CGI, as it is rooted in the individual subject. However CGI can still not be said to contain reality in Cartesian realism. Without emotional projection the digital image cannot be felt, smelt, tasted or heard. The sounds of the film can be heard and the images can be seen, emotions such as fear or awe can be felt, but without direct interaction with the screen there can be no 'physicality'. The digital image can therefore not be said to hold any Cartesian realism.

Epistemological reality is, like ontological reality, based in the Platonic school of thought, and states that reality is objective, but can never be fully understood. However, epistemological reality also states that since the entirety of 'facts' in the world can never fully be comprehended, a constructivist approach to reality has to be adopted and the agents of the world must accept that their view of reality can change at any given time since everything holds so much information that even perspective can change the subject completely. Therefore the world has to be defined as 'constructed' in the sense that reality is constructed by the choice of parameters by which it is examined[151].

Epistemological Reality, then, is a way of perceiving the world that states that since the world can never be fully understood, it makes no sense to debate

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[151] Berger and Luckmann. *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*, 1967.

whether it is in fact objective or not, and since it can only be empirically observed, knowledge of the world (if not the world itself) will always be subjective.

Even within the fairly accommodating parameters of epistemological reality, CGI can only be said to be partly 'real'. Epistemological reality is still tied to physical existence, and subjectivity only allows for experience to be unique in terms of what is believed to have physical existence, and as such the vast majority of movie goers will most likely accept that digital images do not have physical existence. However since the viewer is affected by what is seen, the digital images can be said to have reality, if not by itself, then at least in direct relation to the viewer. This subjective reality might be called a *perceptual realism*, which will be explored, in greater detail in Chapter Three.

I would argue that when examining the audience experience of the digital image within a post-modern context, a different approach to understanding reality must be employed. This is especially true since with the collapse of the public sphere in the post-modern, and the situational reasoning that follows, the perception of truth and knowledge has changed too. As has already been established in the previous chapter the knowledge in any given situation has to be established within the situation, and therefore any given situation creates and defines its own reality and perception of truth. This is a constructivist approach to reality that could be described as epistemological in nature since it regards the subjects' *understanding* of reality.

In the post-modern hypercritical attitude, any theory or science that claims to hold objective truth is abandoned, that is, knowledge that claims to hold true in any given situation. This position echoes Lyotard's statement regarding the

abandonment of prescriptive rules since anything that cannot be challenged becomes invalid. Every idea has to be tested and verified in every situation it appears in. The abandonment of prescriptive rules, however, does not mean that we cannot make use of theories that claim objectivity, but merely that we do not automatically accept them as legitimate outside of the situation they appear in.

To put this concept in the terms of the language games: when faced with any theory (a referent) we (the receivers) can accept or reject the authority of the theory (which, then, becomes the sender) and react accordingly. Scientific theories are therefore legitimate to use in a situation where they are applicable to the problem. However, until used, these theories are considered illegitimate in the sense that, without a situation they have no merit because of the "pretentious universalism's abstract misapprehensions"[152]. This makes the very notion of universalism in the post-modern a misapprehension. If we only accept science within the situation and thereby abandon everything that is not useful within that situation, it would follow that everything is abandoned until used, which in turn means that everything unused has no meaning and therefore no reality. The reason created by the agents within any given situation is in the spirit of the hypercritical legitimising attitude that is the trademark for post-modernism, and what Habermas calls 'communicative reason'[153].

This in turn explains how the public sphere has changed as mentioned in the previous chapter. Instead of using the public sphere as a buffer zone between individuals and state, the public sphere instead becomes an area for the individuals to assert their existence and their merit within society. The public sphere then becomes the very proof of our existence in society, and the notion of

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[152] Habermas. *The Philosophical Discourse of Modernity: Twelve Lectures*, 1987, p. 26.
[153] Ibid.

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identity becomes linked with the notion of publicity. Unless we are seen, we do not exist, and in every situation in which we are seen, we are sending messages and interacting in a language game.

This notion of identity and existence only gaining merit through public interaction is what Baudrillard labels Hyperreality[154]. A thing or a person is no longer defined by its relation to monetary value or static social paradigms, such as religion or politics, but must appear in a context to have meaning. Therefore when an item is observed, it is no longer seen as having any intrinsic value as an object, but as containing possibilities. The thing is nothing, but the idea of the thing is everything. A bathing suit represents a trip to the beach, a car represents a road trip, or cruising down Main Street. The same applies to people as they become identified by what they signify, what they wear, or the context they appear in. But without a situation or a context, there is no subject. This, he agrees with Habermas, means that agents of society no longer have a distinct public or private space in which to act:

> In a subtle way, this loss of public space occurs contemporaneously with the loss of private space. The one is no longer a spectacle, the other no longer a secret.[155]

The loss of private and public space combined with the hyperreality that occurs when objects and people lose their intrinsic value, and instead become only possibility, is what Baudrillard calls the obscenity of the visible. Everything is visible, everything is a scene. Everything has to be valued to have meaning. CGI, then, gains its value and meaning through the visible, and as it reveals its

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[154] Baudrillard. "The Ecstasy of Communication", in Foster, ed. *Postmodern Culture*s, 1985.
[155] Ibid., p.130.

position as digital, becomes a scene in its own right. As an agent of the fantastic it contributes to the overall value of the film, as it is not just visible, but a visible spectacle.

This means that we have to have an audience to have value, which in turn means that instead of having a core autonomous being and identity, we are only what we appear to be in any given situation valued by our spectators. We are no longer mirrors of our society, because the society has been replaced by the situation. Instead we become a network of influences or a screen on which we can project ourselves[156].

Baudrillard states that this means that we create a communication both through and with objects[157]. We share an uninterrupted interface with our objects and we can no longer be said to be separate from them. In any given situation we consume our objects, and our objects in turn, consume us. The objects give us both value and meaning. In terms of language games, the objects can be said to lend authority to our referent of identity. They can also be said to communicate directly with us and make promises, like the promise of technology representing a future dystopia or utopia, and in turn bestowing those terrifying or awesome qualities onto the consuming subject. The digital image, then, is consumed by the viewer as a representative of the digital narrative and in turn the viewer is instilled with all the terror, power and awe contained in that image.

This leads to a sense of a complete reality confined within any given situation. Since the post-modern condition is amongst other things the abandonment of perception of reality outside the given situation, that situation can be said to hold

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[156] Baudrillard. "The Ecstasy of Communication", in Foster, ed. *Postmodern Culture*s, 1985.
[157] Baudrillard. *The Ecstasy of Communication*, 1988.

all relevant fact since anything outside, and not pertaining to, the situation does not have any value, and in that sense, does not exist. Once these facts have been established, they are by the constructivist nature of language games, indisputable. This makes every situation a micro-cosmos with its own objective reality (objective only within the situation), which in turns means that the perception of reality in that situation is ontological. The participating agents within the situation define their own reality, and thereby the micro-cosmos of that situation, creating a perceptual ontology in every given situation. Reality and meaning being defined through use, makes CGI 'real' in any situation it is used in to any agent within that situation. From a perceptual ontology point of view, perception of reality *is* reality.

Having explained the governing theory behind the potential reality of the digital image, I will in the following chapter examine what methods the viewers' use to transform that potentiality into carnal truth. For the image to facilitate the truly sublime moment, the viewer must be fully and physically immersed in the image. It is therefore not enough for the viewer to accept that the image *can* contain reality, it must do so in a physical and cognitive sense in order for the power of the digital image to become truth. The following chapter will both examine theories that can explain how the transformation from potential to actual reality can happen, as well as examine the seductive methods employed by the film to facilitate that change.

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# **Chapter Three**

## *Understanding Reality*

According to situational ontology the situation is an entire dynamic universe in its own right. Every facet of every fact needed to understand that world exists within the situation and its governing parameters. The agents within the situation describe and create reality that is objectively true for that situation – a moment of pure truth that vanishes as new information changes the situation – thereby reflecting the very essence of post-modern culture and its situational reasoning. A digital image, for example, can at first glance appear real and carnal, and in the situation it *is* real and carnal, but as it moves it looks stilted and unreal. As the information has changed, so has the situation, and a *new* situation arises where the digital image appears, and therefore is, stilted and unreal.

The concept of reality being defined entirely by the subjects within a given situation is echoed by Prince's idea of perceptual realism, which he relates specifically to the film experience[158]. Prince describes the viewing experience as involving the learnt perception of what constitutes realism on the screen. For Prince, the audience has been programmed to accept photographic images as having indexical reality[159], and they immediately assume, therefore, that any given reference in the picture relates to a point in ontological or Cartesian

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[158] Prince. "True lies: Perceptual Realism, Digital Images, and Film theory", in *Film Quarterly* Vol. 49, no. 3, spring 1996.

[159] Prince quotes Andre Bazin and Charles S. Pierce as stating that photographs are a direct indexical reference to the 'real' world in Prince. "True lies: Perceptual Realism, Digital Images, and Film theory", in *Film Quarterly* Vol. 49, no. 3, spring 1996 pp. 27-37.

reality. Arguably, this state of default acceptance of reality diminishes with the special effects driven illusions of cinema since it would seem that these creations have no reference point in the real world. According to Prince, however, the audience can, and does, achieve a suspension of disbelief to accommodate the moments of special effects as real, sutured as they are within the narrative, and drawing on their programmed belief that all images, regardless of their origin and representation, display at least a variety of reality. Prince states that if we subscribe to an indexical reference model, or to a Cartesian reality, where everything has to exist in a three dimensional reality to have value and reality, a position typically employed by film theorists, we do not understand the audience's cognitive experience as it takes place in the cinema. A correspondence based model is needed to explain the situational reality that is created between viewer and film at the moment of reception[160].

By applying this theory to cinematic narrative one allows images that would be deemed referentially fictional in a three dimensional Cartesian reality to become perceptually realistic within the realm of situational ontology and we, like the audience, must therefore treat the narrative and the image on screen as real for the purpose of audience/film interaction. This means that a spectator of *The Abyss*[161], for example, can allow for the reality of the pseudopod insofar as the narrative of the film and the situation is concerned, even though when discussing the film afterwards they will agree that it cannot have an indexical referent in a Cartesian reality governed by the laws of physics. The audience in other words achieve what is defined as *suspension of disbelief* or as Steve Neale

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[160] Prince. "True lies: Perceptual Realism, Digital Images, and Film theory", in *Film Quarterly* Vol. 49, no. 3, spring 1996 p. 31.
[161] *The Abyss*, directed by James Cameron, 1989.

labels it *suspension of Judgment*[162], which explains how the audience members allow for, and judge, images to be true for the purpose of the narrative and in turn for the situation, even though they know in their heart of hearts that it does not and cannot hold true for the purpose of indexical referencing. This is not, however, a way for the spectator to encompass a fictional world within the parameters of a Cartesian reality, but instead a cognitive shift in the viewers' understanding of the narrative, to allow it a set of parameters exclusive to itself, and therefore separated from Cartesian referencing.  In other words the audience only pass Judgment on what they see on screen in relation to the narrative of the film, and not in relation to a Cartesian set of indexical references, or to an extraneous ontological world. That the narrative on screen contains its own truth is further explained by Christian Metz, who states that the signifiers on screen bear no connection to Cartesian reality, but only to the closed circuit of the fictional narrative:

> In the cinema it is not just the fictional signified, if there is one, that is thus made present in the mode of absence, it is from the outset the signifier.[163]

The spectators, then, not only suspend their Judgment of the 'real', but completely abandon the rules of a perceived ontological world to enter into a symbiosis with the film's narrative in which they create a new set of rules and references in the situation. One can usefully, if provocatively, extend this continual re-negotiating of the parameters of the real to the larger, more potent,

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[162] Neale. "You've Got To Be Fucking Kidding!' knowledge, Belief and Judgement in Science Fiction", in Kuhn, ed. *Alien Zone*,  1990, pp. 160-9.
[163] Metz, The Imaginary Signifier, quoted in Neale. "'You've Got To Be Fucking Kidding!' Knowledge, Belief and Judgement in Science Fiction", in Kuhn, ed. *Alien Zone,* 1990.

macro-narrative of the film such as any genre or framework that surrounds the narrative of the film.

This symbiosis of the spectator defining the situation by macro-narrative understanding in concert with the filmic narrative and suspension of Judgment, allows for a new reality to be created within the situation, which in turn allows for the mutual consumption Baudrillard explains is a basis of post-modern communication[164]. As an agent enters into any social interaction with a need for personal fulfilment, he also knows that he in turn is being consumed for the fulfilment of the other party to the interaction, even if the other party is inanimate. Baudrillard exemplifies this with the idea of a car, where the 'value' of the car has changed from simple possession to a dream of driving:

> No more fantasies of power, speed and appropriation linked to the object itself, but instead a tactic of potentialities linked to usage: mastery, control and command, an optimalization of the play of possibilities offered by the car as a vector and vehicle, and no longer as object of psychological sanctuary.[165]

Baudrillard plays with the idea that in and of itself the car no longer has any value, just as agents of society have no value in and of themselves, separated from interaction. Only through interaction, in playing on the same scene, can *anything* obtain any value.

We consume the potentialities of the car, and become active agents on the public scene, just as the car in turn obtains its value from consuming our potentialities. Mutual consumption then, is a symptom of interaction, creating value within the situation. Within the realm of the cinema this means that in

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[164] Baudrillard. *The Ecstasy of Communication*, 1988.
[165] Baudrillard. "The Ecstasy of Communication", in Foster, ed. *Postmodern Culture*s, 1985.

order for us to communicate with the film, and thus enter into a symbiosis of mutual consumption with the film, the spectator must first accept the potentialities linked to the images on the screen. This can only be achieved by accepting the signifiers of the filmic narrative in their own right, as opposed to regarding them as the fictional signified in the mode of absence[166]. This means that the digital image must be perceived as containing its *own* reality instead as being perceived as a referent of a physical reality. CGI, then, becomes simulacrum and obtains its own reality in the communicative network.

By employing the suspension of Judgment that is critical to any fictional narrative, and accepting the given narrative as truth for the purpose of the film, the viewer enters into perceptual realism, and in turn the ecstasy of communication. In turn the viewer is created within the images on screen and the screen is created within the viewer.

However, even though we are abandoning the Cartesian reality of indexical referencing to enter into situational symbiosis with the film, or indeed any cultural interaction regarding a fictional paradigm, we are actually embracing Cartesian duality, if not Cartesian reality, since we bring not only our minds, but also our *bodies* into the situation. To understand this argument I need to employ the cine-phenomenological work of Vivian Sobchack.

As Vivian Sobchack explains when discussing the way that film senses itself, the spectator/viewer is being informed both on a *microperceptual* and a *macroperceptual* level[167]. Microperception is a sensory perception that relates to the body, and bodily experience allowing the viewer to live the narrative in a sensory and carnal way. The body of the screen and the body of the viewer

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[166] Metz, Trucage and the Film, *Critical Inquiry,* Vol 3, No. 4, 1977.
[167] Sobchack. "The Scene of the Screen: Envisioning Cinematic and Electronic "Presence"" in Gumbrecht, ed. and Pfeiffer, ed. *Materialities of Communication*, 1994.

become interconnected organs, pulsating with the life of the images and feeding the narrative as well as the self. Macroperception relates to cerebral and conscious perception: the analysis of the narrative and the situation which the audience members' think-feel themselves in when watching a film. Their cinematic experience, then, is a whole body experience, where they enter into the world of the narrative with body as well as mind, thus liberating themselves from the morals and regulating severity of Cartesian reality[168].

This correspondence-based perception of cinema not only allows the viewer to enter into the projected reality as a bodily and cerebral agent, thereby creating a full-body experience, but also allows the viewer to interact with the screen, creating a network within the situation where the film and the viewing agent connect on both a carnal and conscious level[169]. Having expanded the correspondence model Prince suggested as perceptual realism[170], to include perceptual ontology and a full bodily immersion into the film, the term 'correspondence model' no longer seems satisfying. Correspondence suggests communication between autonomous agents, while a networking model where the full-body perceptual immergence envelops the agents who enter into a symbiosis, allows the viewer to become part of a unity, the situation that becomes the symbiotic universe. We are part of the communication directed at us, eliminating references, overcoming reality, removing ourselves from the spectacle of alienation and entering into the ecstasy of communication where Baudrillard states there are no more representations only interactions.

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[168] Sobchack. "The Scene of the Screen: Envisioning Cinematic and Electronic "Presence"" in Gumbrecht, ed. and Pfeiffer, ed. *Materialities of Communication*, 1994. p. 79.

[169] Baudrillard. "The Ecstasy of Communication", in Foster, ed. *Postmodern Culture*s, 1985 and Sobchack. "The Scene of the Screen: Envisioning Cinematic and Electronic "Presence"" in Gumbrecht, ed. and Pfeiffer, ed. *Materialities of Communication*, 1994.

[170] Prince. "True lies: Perceptual Realism, Digital Images, and Film theory", in *Film Quarterly* Vol. 49, no. 3, spring 1996.

> *We no longer partake of the drama of alienation, but are in the ecstasy of communication.* And this ecstacy is obscene. Obscene is that which eliminates the gaze, the image and every representation.[171]

According to Baudrillard we become what we sense, and it, in turn, becomes us. There is no viewer and no screen, but only the reality of the network. The viewed cannot be false to the viewer, simply because the viewed *is* the viewer.

Using Sobchack and her model of bodily interaction with the screen, the physical relationship between the viewer and the viewed, or rather between the agents of the situation, will be examined in the following sub section. This relates not only to the audience perception of the film, but also to the understanding of how the sublime can be achieved through this relationship.

## *Touching the Digital Image*

Understanding that the audience, in a very physical sense, enters into the relationship with the film, and thereby establish a unique situation, with its own reality and rules, requires the theory of haptic touch. The microperceptual way of experiencing images through our body's memory of touch, and feeling what we see, allows the audience to physically enter into the film/viewer relationship and the mutual consumption of the situation. This theory has its origins in *haptic visuality*.

Haptic visuality is a term originating in physiology, but adopted by Aloïs Riegl, a historian, to distinguish between seeing things from a distance to distinguish their physical form (optical visuality), and examining them up close

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[171] Baudrillard. *The Ecstasy of Communication*, 1988, p. 22.

and assessing their texture using our sensory experience, thereby awarding them certain values (haptic visuality)[172]. More crudely Riegl defines the difference as the difference between understanding the seen as either object (optical) or subject (haptic), which in turn means that as soon as the viewer assigns any values to the observed, it changes status from optic vision to haptic vision. This, however, is still merely a cognitive process that does not include bodily memory. Laura U. Marks expands the meaning of the concept to not only include the allocation of values, but also the allocation of affect, where the viewer associates optic images with other sensory memories such as the tactile or olfactory senses, and the experience of the image thereby becomes a full body and carnal experience[173]. Crucial to Marks' carnal definition of haptic visuality is that the separation between an image understood by the mind and an image understood by the body disappear with the allocation of affect, what the viewer sees is no longer an abstraction or mere representation but something he or she can interact with. The viewer becomes able to sense, see, feel and smell the image. In other words, the image becomes *real[174]*. Marks, however, seems to confine the sense of haptic visuality to images that are separated from their representational objects by such means as change of focus, colour grading, granulating the images or even loss of quality due to wear of the video or film[175]. This strict division between haptic (body) and non-haptic (mind) vision seems counterintuitive since it would appear that, according to Marks, we cannot access our body's memory of the subject unless the subject is distorted in

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[172] Aloïs Riegl is quoted in Marks. *The Skin of the Film*, 2000.

[173] Marks. *The Skin of the film*, 2000 pp. 163-4.

[174] Haptic vision become real only in a Cartesian and epistemological way that is, not ontologically real, since only the first two perceptions of reality refer to our senses as a measure of reality. The ontological difficulties of that reality are described in Marks. *The Skin of the Film*, 2000, p. 172.

[175] Marks. *The Skin of the Film*, 2000.

some way, thereby losing or at least minimizing its indexical status. The division between body and mind still persists within Mark's theory, but the body is assigned cognitive powers of assigning value. This would suggest that digital special effects could easily make the transition into special *affect*, since they, by their very nature, are separated from their indexical referent.

There is however a serious fault to that logic, since we have already established that the audience enters into a separate state of indexical referencing, where images are not valued by their Cartesian equivalent but instead on the space they occupy within the narrative. Therefore, the images must be allowed to be valued by their indexical referent within the situational reality instead of Cartesian reality, and they can then no longer be said to be separated from that referent. In *Jurassic Park,* for example, the digitally created dinosaurs are not references to prehistoric creatures, but instead *are* dinosaurs in the realm of the film. There is no 'objective reality' to refer to, only the reality of the film itself. Therefore the digital image cannot be said to be removed from its indexical referent within the terms of situational ontology.

Vivian Sobchack solves this problem and takes the term haptic visuality much further than either Riegl or Marks. By not confining haptic visuality to projections that differ from their indexical ontological equivalent, but instead insists that *because* the body 'remembers' all sensory inputs, and the world is understood through these sensory inputs, they help give not only meaning, but also affect to the projections[176], thereby becoming haptic and carnal.

The *lived body* is a carnal mediator of memories and sensory inputs, and is indivisible from the mind, as well as the senses themselves being indivisible

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[176] Sobchack. *What My Fingers Knew: The Cinesthetic Subject, or Vision in the Flesh*, 2000.

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from each other. In other words the viewer cannot see an image without projecting onto it a sense of touch or smell. When the viewer sees something disgusting the body feels sick and attempts to expel the offending material; when the viewer sees something frightening, the hair stands on end as 'the inner monkey' prepares for flight. The body and the mind cannot function without each other, just as memories and sensory inputs cannot be either cognitive or carnal, they must always be both. As Sobchack argues:

> The point to be stressed here is that we do not experience any movie only with our eyes. We see and comprehend and feel films with our entire bodily being, informed by the full history and knowledge of our sensorium.[177]

Sobchak's definition of haptic touch means that not only *can* we achieve a full body experience through watching a movie; we *must* achieve a full body experience, simply because our body memory is controlled by senses and the way we make sense of the seen is through that body memory. It is also important to Sobchack that the haptic touch, the carnal way of watching a movie, is not a reflexive but pre-reflective response, and is not controlled by, but at best, mediated through our mind - we are, in a very direct way, touching ourselves, or at least touching the sense of touch, and smelling the sense of smell. The senses are activated, and since there is nothing physically there to touch or smell, we smell the memory of smell, and touch the memory of touch.

Despite the digital image having an situational referent in the narrative, it still seems a prime site for achieving the sense of special affect, since the digital image or at least active digital special effects, simply because of their

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[177] Sobchack. *What My Fingers Knew: The Cinesthetic Subject, or Vision in the Flesh*, 2000, p.8

specialness are still foreign, and therefore become prime sites for haptic and carnal seduction.

Body memory and senses activated through haptic touch, despite being memory rather than direct physical contact are, according to Sobchack, not diluted but strengthened by their self referential nature. The audience members are living the movie through their body memory, and not limited by physicality, but strengthened by dreams and imagination. Before they reflect on the seen images with their mind, they experience the image with the entire body[178].

To truly achieve the feeling of the sublime, I would argue that the body as well as the mind must be invested in the image. Not just immersed, but fully invested in the fate of the protagonists and the terror or awe displayed by the image. For the image to have the effect of being truly great, truly terrific, it must be experienced bodily as well as understood. With the concept of haptic touch, the viewer can become physically as well as cognitively invested and affected by the images.

Sobchack does concede, however, that even though we indubitably use all of our senses when watching a movie, we do not in fact touch the actual screen, nor do we touch or smell the actual images or depictions on screen, and even though the feeling of touch and smell can be even more overwhelming than if we physically felt and smelled it, it need not be. Sometimes, and possibly most often, we will see an entire movie without being aware of haptic vision. Even in films such as *The Abyss*[179]*,* where I felt what Lindsey Brigman (played by Mary Elizabeth Mastrantonio) felt when she reached out and touched the pseudopod for the first time, a moment of pure haptic joy, a second of full immersion into

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[178] Sobchack. *What My Fingers Knew: The Cinesthetic Subject, or Vision in the Flesh*, 2000, p.8.
[179] *The Abyss*, directed by James Cameron, 1989.

the realm of the film; even though I could, just for a second, literally feel the wet and soft surface of the creature, and smell the salty water, it didn't last. For most of the film I was, like I imagine most, if not all, of the audience, reduced to the role of spectator. To achieve that moment of full immersion, where situational realism overwhelms Cartesian realism, and we see, hear, feel and smell the special effect and it becomes special affect, we need to take part not only in the micronarrative of the film itself, but be poised for it through the situation and the network of signs and rules generated by society and cinema. To truly interface with the film, as Baudrillard labels it, the viewer must first be under the societal hegemony of codes and terminology[180]. To achieve the moment of the sublime, the viewer must be lured into haptic touch by the image and convinced by the language game of the narrative to participate fully in the situation and to treat it as situational ontology.

This naturally leads to the question of how we become enticed, lured into the miconarrative of the film, and in the following the seduction, not only of the film but also the digital image, will be further examined.

## *The Great Seducer*

For a short while, before delving into the seduction of the digital images on screen, I will return to the aspect of narrative, and of the image itself, to explain how the viewer is seduced into a carnal participation of the film. As Tom

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[180] Baudrillard. "The Ecstasy of Communication", in Foster, ed. *Postmodern Culture*s, 1985, p. 126.

Gunning's seminal essay, *The Cinema of Attractions* states: "effects are tamed attractions"[181].

This suggests that special effects envelop us in a world where our projected selves can live out our wildest fantasies in the safety of a movie theatre. The idea of tamed attractions was later used by Bukatman to develop his concept of the tamed sublime[182], which suggests that the sublime feeling achieved from a projected reality will always be less than full. Gunning states, however, that ever since Eisenstein and Marinetti, filmmakers and studios have constantly attempted to involve the spectator on a more personal level, thus constructing the viewer fully within the film[183].

Haptic visuality and perceptual ontology in a setting of the ecstasy of communication, allows the viewer to enter into the image on screen and participate on a completely personal, carnal and subjective level. However, even if the viewers' feelings and emotions translate fully into this projected world, and even if the experiences are felt as powerfully and real as if the viewer was physically there, it is the pre-constructed knowledge of being safe, which allows the viewer to participate in the first place. Once in the cinema, and once we allow ourselves to participate with(in) the images on screen, however, we are by no means safe. The attractions and the sublime are neither tamed, nor are they safe.

On one level, we are attracted to this spectacular world because the rational rules of society and the laws of physics are undone - in science fiction film, for

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[181] Gunning, "The Cinema of Attractions: Early Film, Its Spectator and the Avant-Garde", in Elsaesser, ed. *Early Film: Space, Frame, Narrative*, 1990.
[182] Bukatman. "The Artificial Infinite: On Special Effects and the Sublime", in Kuhn, ed. *Alien Zone II*, 1999.
[183] Gunning, "The Cinema of Attractions: Early Film, Its Spectator and the Avant-Garde", in Elsaesser, ed. *Early Film: Space, Frame, Narrative*, 1990, p.61.

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example, sentient alien beings, flying cars, and fantastic spaceships are common occurrences, and the viewer can settle down amongst these spectacles while his or her physical body remains safe and sound in the comfort of the cinema. Furthermore, according to Gunning, the "Spielberg-Lucas-Coppola cinema of effects"[184] is deemed to be spectacle cinema, which uses "stimulus and carnival rides"[185] to entice its viewing audience. Adrenalin rushes through the viewer as the projected body is sped through harrowing chases and violent explosions.

This differs somewhat from the cinema of attractions, which according to Gunning focuses the power of the cinema into a display of the illusion of the moving picture, rather than focussing on the narrative effect known from stage theatre or, indeed, the thrill of a carnival ride. The wonder of the cinema, according to Gunning, is not found in the narrative, but in the images, which then become texts in themselves with their own meanings and implications, rather then being a sub-category and mere facilitator of the narrative. The images become each their own platform to be *seduced* by, enthralled by and interacted with.

> What precisely is the cinema of attractions? First, it is a cinema that bases itself on the quality that Léger celebrated: its ability to *show* something. Contrasted to the voyeuristic aspect of narrative cinema analysed by Christian Metz,[5] this is an exhibitionist cinema.[186]

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[184] Gunning, "The Cinema of Attractions: Early Film, Its Spectator and the Avant-Garde", in Elsaesser, ed. *Early Film: Space, Frame, Narrative*, 1990, p.61.

[185] Ibid., p.61.

[186] Ibid., p.57 (The reference within the quote is numbered according to Gunning's own notes and refers to: Metz, *The Imaginary Signifier: Psychoanalysis and the Cinema*), 1982, pp. 58-80, 91-7.

This view of the image being the true wonder is supported by the advocates of haptic visuality. It is the picture that moves us, wakes our senses, and drives the carnal body into full immergence in the unfolding spectacle.

Sobchack writes of images that evoke body-memory, which allows the spectator to activate body functions to create unique sense experiences[187]. Gunning, on the other hand speaks more of the sense of cognitive wonder and emotional upheaval that arises from seeing something ground-breaking like the first presentations of the X-ray, or as frightening as a gunman unloading his gun into the camera, and by extension into the viewer, in *The Great Train Robbery*[188].

However, they both regard the images as more than narrative. They regard the power of that one sublime shot, where I would like to suggest the viewer or spectator becomes 'inter-subjectively' a part of the film, fully at one with the experiential values of the screen effect/affect. The power of the moment where the viewers are not just witnesses of, but screen sensing participants to something so extraordinary that they become part of its orbit.

I would argue that the groundbreaking digital image in all its foreign splendour and majestic superphysical nature is such an image. Fuelled as it is by the technological prowess that has gone into it, and the awe and terror it inspires, both through the digital narrative of evolution or technology and the micronarrative of the unfolding story, and situated in a carnal interaction with the viewer. Such an image is arguably the optimum site for the sublime moment

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[187] Sobchack. *What My Fingers Knew: The Cinesthetic Subject, or Vision in the Flesh*, 2000.
[188] *The Great Train Robber*y, directed by Edward S. Porter, 1903, quoted in Gunning, "The Cinema of Attractions: Early Film, Its Spectator and the Avant-Garde", in Elsaesser, ed. *Early Film: Space, Frame, Narrative*, 1990, p.61.

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whether it is understood as created through haptic touch, or through the cinema of attractions.

One or the other doesn't finally matter since both concepts recognise that the viewers are no longer mere spectators to the images unfolding before them, but co-creating the story of wonder and awe-inspiring fantasy. They *become* that story. I would like to suggest that this particular seduction, be it haptic or achieved through the cinema of attractions, happens on a micronarrative level.

While the viewers are immersed in the unfolding story on a bodily level, becoming the story with and through their senses, they also need to be cognitively seduced, on an either conscious or subconscious level, in order to fully participate in the narrative of the film. They need to fear, hope and participate with their minds as well as their bodies, which leads to the concept of cognitive seduction.

As has already been mentioned, the single greatest cognitive seducer, according to Baudrillard, is the secret, the unknown. Everyone *needs* to be seduced people crave the unknown and the joy of the secret[189]. Since the early days of cinema the wonder of stage magic, and later fully realised through special effects, has thrilled not only our bodily sensation of the screen, but also our cognitive desire to know or feel-think the unknown and the unthought.

Even though Neale suggests that certain films self-reference or self-reflect on the special effect moment[190], the audience members are never told within the realm of the film *how* these wonders are created. This self-referencing allows the viewer to understand that what he or she is witnessing is the latest and

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[189] Baudrillard. *The Ecstasy of Communication*, 1988.
[190] See *Death of Cinema*, pp. 19-23.

greatest in digital special effects[191]. The viewers, however, are never taken completely into the secret and while they know that what they are witnessing *is* the latest and greatest, the secret lingers and they never know exactly *why* it is the latest and greatest.

Magazines, behind the scenes footage and special features depicting an upcoming film will often 'out' the new special effects, showing in great detail how the newest techniques and latest technologies were employed to create these realities. However, the details disclosed to the audience never fully convey the process. They'll often omit a lighting algorithm here and a pixel shader there, leaving the audience with only the vague sense that technology made it possible. The secret remains to anyone who is not a computer engineer, and even to those who are, it remains elusive, a mystery, and the viewers' revel at both a corporeal and cognitive level in the technological wonder that is the unknown; the secret.

> As Metz himself points out, while there is always a degree of duplicity, of secrecy, of the hidden attached to special effects, there is always also 'something which flaunts itself'.[18] This flaunting both caters to – and counters – the spectator's awareness, while ensuring at the same time that cinema will take the credit for the impact. Either way, cinema gains.[192]

In '*American Cinema and Hollywood: Critical Approaches'*, Duncan Petrie explains that throughout cinema history, audiences have been drawn by the

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[191] Neale. "You've Got To Be Fucking Kidding!' knowledge, Belief and Judgement in Science Fiction", in Kuhn, ed. *Alien Zone*, 1990.
[192] Ibid. (The reference within the quote is numbered according to Neale's own notes and refers to: Metz, "*Trucage* and the Film", *Critical Inquiry*, vol. 3, No. 4, 1977).

wonder of technology. In the early years, new technology was an even greater attraction than the material being exhibited[193]. He continues:

> Technology is necessarily directed towards particular goals or uses. Indeed, the interest most film scholars have in technology is very much in how it relates to aesthetic practice. Their task, therefore, is not only to describe and identify particular inventions, technologies and techniques, but to account for then within a dynamic perspective grasping the processes of development and change.[194]

To use the newest technology in order to achieve a cinematic experience that had hitherto been impossible is therefore not enough to satisfy the audience. It is also needed to show that the technology *is* the newest. It is needed to demonstrate that *this* movie is on the cutting edge of technology.

In the last 25 years the most prominent technological advance in film has been digital imaging, and the technological marvel that is CGI. Audiences flock to the cinema to partake in the latest and greatest and yet, as with the stage magicians, they never fully know how it is done. they consume the digital imaging on screen celebrating the technological masterpiece by their presence within the film. they want to be fooled by the images on screen, but they also need to know *when* they are being fooled; for the film to draw attention to the digital image so the audience can truly revel in its spectacular existence. The audience wants to be part of the secret without ever truly knowing what it is. Baudrillard's definition of the secret, of seduction, is perhaps key to understanding the lure of digital special effects.

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[193] Petrie. "History and Cinema Technology" in Hill, ed. and Gibson, ed. *American Cinema and Hollywood: Critical Approaches*, 2000.
[194] Ibid.

> The secret is never the repressed. It is never "everything you don't know and have always wanted to know" (Woody Allen), it is that which no longer pertains to the order of truth. That which, saturated with itself, withdraws from itself, plunging into the secret and absorbing everything surrounding it. An immediate contagious giddiness: seduction operates through the subtle pleasure which beings and things experience in remaining secret *in their very sign* – while truth operates through the obscene drive of forcing signs to reveal everything.[195]

The viewer is taken on a rollercoaster ride through action and suspense, on a guided tour of forgotten and impossible worlds, but he or she is never explicitly explained the process of getting there. Vague references to the magic of computer imaging are the only signposts of the truth behind the secret. Whether the viewer is enthralled by technology or repulsed and terrified, the mystery creates a sense of the impossible, that what the viewers are experiencing cannot possibly be true. This is the foundation of both the lure and the terror of the digital image. Much like with stage magic the viewer is dazzled by the impossible and needs to become part of the secret. Part of the act. Part of the screen. Part of the awe. The viewer is no longer a mere spectator but an agent within the realm of seduction, poised for the image to convey that elusive feeling of full immersion into the sublime.

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[195] Baudrillard. *The Ecstasy of Communication*, 1988, p.66.

## *Diving In*

In this section I will explain how the theories of haptic touch, full body seduction and the reality in situational ontology create an intersection where the viewer can immerse fully into the images on screen. In order to truly enter into a screen/spectator *reality*, a place that in every respect is as real for the spectator as the world outside, the viewers cannot merely participate with one or two aspects of their beings such as vision and hearing, but must submerge fully into the realm of the film. In other words in order for Steven Prince's idea of perceptual realism to become truly *real* the viewers must leave behind their Cartesian forms and become part of the Baudrillardian network. As mentioned Baudrillard states that any agent within a network holds no value in and of itself; value can only be obtained through use:

> As soon as this scene is no longer haunted by its actors and their fantasies, as soon as behavior is crystallized on certain screens and operational terminals, what's left appears only as a large useless body, deserted and condemned. The real itself appears as a large useless body.[196]

Physical being is, according to Baudrillard, of no inherent value, and physicality becomes, within this post-modern understanding, an attribute linked only to existence, but not necessarily linked to reality. The real instead becomes the real found in interaction and simulation. The real ceases to be a description of the physical, and instead becomes an element of how the world is understood:

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[196] Baudrillard. "The Ecstasy of Communication", in Foster, ed. *Postmodern Culture*s, 1985, p. 129.

> What I mean is this: what was projected psychologically and mentally, what used to be lived out on earth as metaphor, as mental or metaphorical scene, is henceforth projected into reality, without any metaphor at all, into an absolute space which is also that of simulation.[197]

This reality can also be described as situational ontology, the idea that anything perceived as real within the situation becoming real because it is perceived to be so[198]. That physicality is no longer necessary to attain a status as *real* means that the most common critique of CGI, exemplified by the previous Quentin Tarantino quote[199], that CGI has no value, because it is not real, and that CGI is not real because it has no physical being, cannot be said to be valid for the spectator.

In the situation, what unfolds on the screen becomes an agent of that situation. It gains its validity, therefore, purely through interaction. The validity of CGI as defined through use has become the foremost trait when defining reality in post-modernity. Reality, therefore, must be defined within any given situation[200], and not by any dogmatic and static rule set such as Cartesian reality.

To paraphrase, the argument that an image with a physical referent is somehow 'better' than a digitally created image, one could also decide that the colour red is used to evoke emotion, and those filmmakers who use red for that purpose are resorting to a 'stunt'. Filmmakers, then, who evoke the same emotions without resolving to use colour as a stimulant would then be celebrated because the emotion they evoke is more 'real'. The point is that whether or not any tricks or stunts were used to evoke any given emotion, the emotion was evoked. It was there, and it was real. The origin of the emotion,

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[197] Baudrillard. "The Ecstasy of Communication", in Foster, ed. *Postmodern Culture*s, 1985, p. 128.
[198] See *Redifining the World*, pp. 53-60.
[199] Tarantino in *Empire Magazine*, November 2003, see *Death of Cinema,* p. 19.
[200] See *Redifining the World*, pp. 53-60.

then, becomes irrelevant from the emotee's point of view, unless that emotee belongs to the particular interest group described above. By the same token CGI must be discussed through its inherent values and faults, and not by arbitrary rules of what constitutes 'correct' cinema. In hindsight or when discussing the skill of filmmaking one can use any yardstick to define merit, but within the situation, when discussing the interaction between film and viewer, the only reality or merit that truly matters is that which is felt, seen, and indeed, lived.

Furthermore through Sobchak's concept of haptic touch[201], the spectator can break the confines of physicality and in a very real sense *take part* in the action on screen. The spectator does not need to settle for the thrill of CGI as a spectator sport, but can participate in the amazing images on screen with the full range of senses.

In order to be fully and truly immersed within the film, or, indeed, the situation, the moment, the viewer needs to be seduced not only with the senses, but with the mind as well. As described in the previous chapter, the seduction is vital for the spectator to be enthralled by the images on the screen; the seduction of the images as being thrilling and the seduction of our tactile and olfactory senses to be activated. The seduction of the secret, that which is hidden, becomes the seduction of the mind. The seduction is the key to the moment of the sublime.

That one instant where the viewers truly, without any metaphors or symbolism, become one with computer generated image on the screen is the first step to achieving the sublime. To then appreciate the image that awaken the viewers' innermost fears, desires or fantasies is the second, which leads to that

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[201] Sobchack. *What My Fingers Knew: The Cinesthetic Subject, or Vision in the Flesh*, 2000.

one moment that stays with them forever, the sublime. The terrific feeling of being one with the past and the future, of being in every sense of the world, right there on screen, terrified and exhilarated, *is* the sublime.
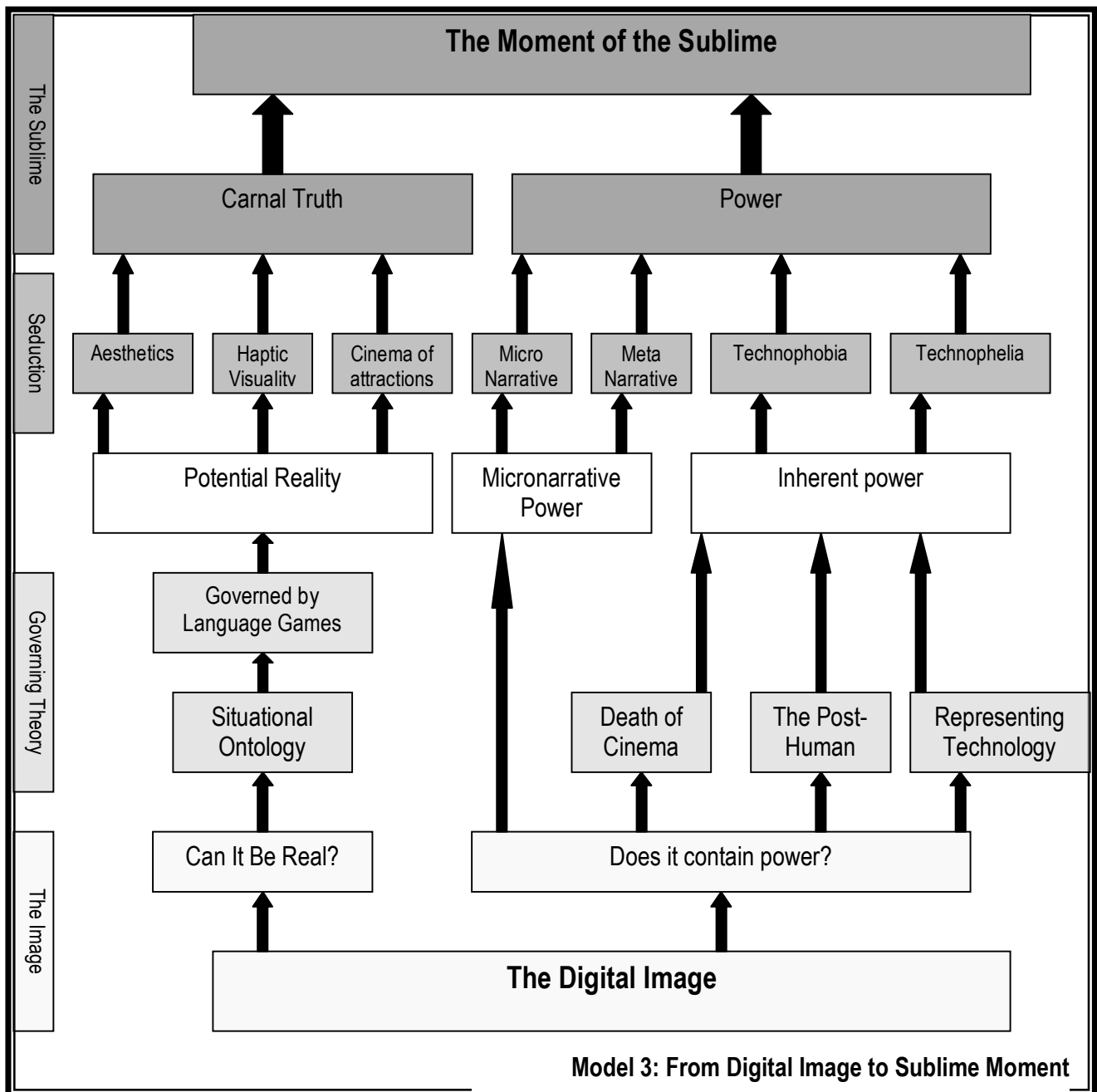

## *The Digital Sublime*

For the digital image on screen to become sublime in any way requires the audience to subscribe to the viewed as containing power and being carnally true. The power needs to be greater than the viewer *within* the paradigm of the viewer's subjective reality. This means that the viewer must subscribe to a belief that the digital image holds a very real, carnal position of power, which can take form as fear or delight. In other words, the viewer must subscribe to the *potential* power of the image. This potential power can stem either from the inherent power in the digital narrative, or from power provided directly from the micronarrative of the film.

Furthermore, the viewer must be seduced into believing in the potential carnal reality of the image. This potential reality is possible through situational ontology and the idea of the autonomous situation. The method of seduction can be aesthetics, haptic visuality or the 'cinema of attractions' and the result is the viewer's carnal participation.

The viewer, however, does not need to be swayed by *all* of the methods listed; just one sense activation and one source of power are needed to achieve the feeling of the sublime. This means that as long as the senses are activated and power is bestowed to a degree that allows for a full body immergence, the digital image can provide the viewer with a sense of the sublime.

To better visualise the correlation between the digital image and the moment of the sublime discussed so far, I have devised the following model:



**Model 3: From Digital Image to Sublime Moment**

As the model shows, there are two major groupings between the digital image and the moment of the sublime. There is the governing theory that grants the digital image *potential* power and reality. This allows the digital image to become a potential site of the sublime. The second grouping comprises the

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seduction that actualises the potential power and reality. In order to achieve the moment of the sublime, then, the viewer needs to make be seduced by one of the three methods converting potential reality into carnal truth. The viewer also needs to assign a true sense of power to the image either through the inherent power of the digital image, or through the micro- or metanarrative.

To be seduced to such an extent that the viewer becomes an agent within the film, part of the network generated in that situation between viewer and screen, allows the senses free range within that network. The viewer must participate fully in the situation, or as Baudrillard states it, leave the scene and mirror behind and participate in the operations between screen and network[202].

According to Baudrillard, the scene and mirror represent an outdated way of viewing the world where everything the viewer interacts with has an intrinsic value, regardless of agents and their interactions. The viewer's are limited to projecting themselves into the object, with all their fears, needs and affects.

Instead the screen and network represent the state of being where the value an object holds or, indeed, *can* hold is tied to use. The agents of the situation participate *with* the object instead of projecting themselves *into* it[203].

If the viewer insists on the film and in turn the digital image on screen as being separate from him or her, the possibility of achieving the feeling of the sublime is denied. If the viewer decides that reality, arbitrary as it may be, must be linked to indexical references within a Cartesian world, or that participating in something frivolous such as a fictional narrative somehow leaves him or her vulnerable or degrades the intellect, the feeling of the sublime is also denied; not

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[202] Baudrillard. "The Ecstasy of Communication", in Foster, ed. *Postmodern Culture*s, 1985, p. 126.
[203] Ibid., p. 127.

only the pleasure, but also the understanding that stems from real, bodily, physical experiences of the sublime.

Therefore, when examining the digital image in film, the most important aspect becomes the seduction. The governing theory shown in the model explains that the digital image will always have *potential* power and truth, and since the potentiality is given, there is no need to examine whether individual films contain it. Furthermore, since the sublime moment is a subjective experience it makes no sense looking for the sublime moment in film. What *can* be examined is the framework created around the digital image, and the techniques used to seduce the viewer to transform the *potential* reality and power into *actual* carnal reality and *actual* power, thereby creating *sites* of the sublime.

In the following two chapters I will be examining four films that make use of the digital image, to find sites of the sublime. Furthermore, I will examine the framework that surrounds these sites, to decipher the seduction techniques employed by the film.

To highlight the seduction needed to achieve the sublime, I will be using the following model:

| Seduction of the Digital Image | |
| --- | --- |
| *Seduction into the Carnal Reality* | |
| *Method* | *Effect Needed* |
| **Haptic touch** | Digital image needs to be foreign yet familiar. Senses needs to be stirred by the image. |
| **Aesthetic Judgment** | Digital image needs to appeal to the viewer's sense of extreme beauty or ugliness to seduce the viewer. |
| **Cinema of attractions** | The viewer needs to be completely seduced by the vividness of the image. |
| *Bestowing Power* | |
| *Method* | *Effect Needed* |
| **Technophobia:** Post-human/ Death of Cinema represented by the digital image. | Viewer needs to subscribe to the digital narrative, which leads to the destruction of the cinema as we know it, or fear of the post-human. |
| **Technophilia:** The technology of the digital image as being truly great. | Viewer needs to believe that the image on screen is truly revolutionizing technology, which breaks barriers that has hitherto been unbreakable. |
| **Micro-/Metanarrative:** The represented as having the power to kill the viewer. | Making the viewer delve completely into the narrative, and believing in the reality of that narrative. |

**Model 4: Seduction into the Carnal reality**

In this model none of the results are guaranteed. A filmmaker can attempt any of the methods described above but the effect needed to make the method a success depends on the viewing agent. If, for example, the viewer is indifferent towards technology in general, and CGI in particular, and further is completely unmoved by the narrative of the film, the digital image on screen cannot achieve

power in that persons' universe, and the sublime cannot be achieved. By the same token, unless the viewer immerse into the narrative to the degree, where that viewer will, on a very real, carnal level, subscribe to the proposed reality, he or she can never achieve the feeling of the sublime. The viewers' must believe that the digital image has the ability to *kill them*. Otherwise they must believe that the image has the power to prophesise their destruction or a utopian future, as is the case of the digital narrative.

It is important to stipulate that with regard to the sense activation it is *not* enough that the viewer can cognitively understand the sensation of the image - it needs to be *felt*. This means that in order to activate the senses the viewer must in a very real and literal way partake in the movie. Body memory must be activated to the degree where the film becomes true to the viewer.

However it is equally important to accentuate that only one seduction method from each grouping is needed to be successful to allow the viewer to achieve the moment of the sublime. Therefore, not all seduction methods need to be in play. Furthermore, some of the films will be using the governing theory behind the potential power or reality to further seduce the viewer, but that is not necessarily true for all films, nor is it necessary to achieve the sublime moment. By examining and analysing the framework behind the digital images in the chosen films, I hope to demonstrate not just that the sites of the sublime exist, but also how they are seducing to the viewer. Finding and examining these sites will hopefully corroborate my theory that the digital image is an obvious site of the sublime.

# Chapter Four

## *The Function of the Fantastic*

As I have already suggested the truly sublime moment is not unique to the digital image. Instead the sublime moment is unique to the viewer, and any given viewer will enter into the situation or network of communication with the image on screen, with a distinct set of references and beliefs. The fear or need for technology is in no way a given source of power for a given viewer, just as taste or aesthetic Judgment can vary widely from viewer to viewer.

It is therefore impossible to create the sublime with any kind of certainty. It is impossible to bestow true power on any object, true power that is, that *every* person would accept and believe in. This impossibility does not restrict itself to digital images or non-physical entities, but rather refers to the divergence between the reference systems of different individuals. As a result any given viewer can achieve the moment of the sublime in any image, situation or network. However, due to the discourses and shared reference systems intrinsic to a shared culture, the post-human, or even 'foreignness' are obvious indicators of common fears. It is possible to capitalize on those fears as sources of power to create obvious *sites* of the sublime. These fears and power sources include, but are not restricted to, technophobia and technophilia, which supply the digital image with inherent power.

As this thesis regards exclusively the audience perception of the sublime in the digital image, there will be no conjecture or speculation regarding the reasons

digital images are part of any film, but will serve solely an analysis of how the obvious sites of the sublime might take place, where and why.

The different narratives, namely macro-, meta- and micronarrative, that the audience uses to make sense of the images on screen, create a division in how the digital image is perceived. One such division of the digital image exists between the digital image in function where the digital technology serves as a mediator of the images and provides optical special effects such as morphing technology or 'bullet time' filming, and the digital image in form, where the digital image represents a creature interacting directly with the narrative rather than being a mediator *of* the narrative. Positioning the digital image and its connotations to interact with these different categories creates a reference to the source of inherent power in the digital image.

As mentioned in sub-sections *Death of Cinema*[204] and *The Terror of the Post-Human*[205], the inherent terror of the digital image can be divided into the fear of evolution that leads to the post-human and the fear of technology that leads to the death of cinema, or by further extension, to the death of humanity, or put in another way, the post-human creature, and the post-human technology. The four movies that I have chosen for the purpose of exemplifying obvious sites of the sublime are: *Terminator 2: Judgment Day*[206], *Jurassic Park*[207], *The Matrix*[208] and *Lord of the Rings: The Two Towers*[209]. I have chosen to divide the movies into two groups. The group consisting of *Jurassic Park* and *Lord of the Rings: The Two Towers* will be introduced in Chapter 5.

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[204] *Death of Cinema,* pp. 17-23.
[205] *The Terror of the Post-Human,* pp. 23-9.
[206] *Terminator 2: Judgment Day*, directed by James Cameron, 1991.
[207] *Jurassic Park*, directed by Steven Spielberg, 1993.
[208] *The Matrix*, directed by Andy Wachowski and Larry Wachowski, 1999.
[209] *Lord of the Rings: The Two Towers*, directed by Peter Jackson, 2002.

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The group that will be discussed in this chapter deals with CGI as function, namely *Terminator 2*, which introduced the 'liquid metal' effect and morphing technologies that led the way for fully digital organic creatures with dynamic surfaces, and *The Matrix*, which through 'bullet time' filming revolutionised what was possible to film, and thereby the medium of film itself.

In order to achieve the truly sublime moment the senses must first be activated. Any image (or even narrative) can achieve this when the viewer cognitively bestows it with power, which can originate from any source within the viewer's paradigm of power, fear, greatness or aesthetics. A most intriguing aspect of the assignment of power to the image is that it is not merely, as one might suspect, a question of the viewer seeing the image and then assigning power, but rather a question of the film or surrounding factors such as digital narrative of the post-human or public discourse of the greatness of the digital effects, allocating power to the image *before* it is ever shown. Power such as technophobia or technophilia comes first, the image second.

Naturally the feeling of the sublime, that the image is truly great and surpasses anything we can understand[210], is one that the audience strives to achieve. The feeling of the sublime becomes a guarantor for success, as the movie will surpass a mere pleasurable experience and take a more immediate part in the viewers' life and memorable experiences. It is therefore not only in the film industry's interest to promote the fear and sense of catastrophe of the digital image[211], but also in the interests of the audience members themselves as *they* strive to achieve a sense of the sublime. By actively engaging in the discourse of

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[210] Kant. *Critique of Judgement,* 1951, also see *The Digital Sublime* pp. 83-8.
[211] Arthur. "The Four Last Things: History, Technology, Hollywood, Apocalypse" in Lewis, ed. *The End of Cinema as We Know It: American Film in the Nineties,* 2001, see *Death of Cinema,* pp. 17-23.

terror that surrounds the digital image, they are assigning power to the digital image and the digital technology.

The fear of, or need for, technology will be emphasized in the following two case studies, *Terminator 2: Judgment Day* and *The Matrix*. This fear is commonly utilised as a motivator for the site of the truly sublime in digital images that serve as function. This is the fear characterised as the death of cinema in Chapter One. I will examine how the context of the site is set up, both through the narratives in play and through signifiers in the images on screen.

## *Judgment Day*

> James Cameron's 'Terminator 2: Judgement Day' is a lustrous machine, all gleaming steel and burnished gunmetal, with state-of-the-art nuts and bolts. You relate to it the way you might relate to any overpowering machine, a little dispassionately but with a respect bordering on awe.[212]

In the 1991 film *Terminator 2: Judgment Day*, a robot assassin returns from the future to slay the human resistance leader John Connor (Edward Furlong), who in the future will lead the battle against the machines. In the first film, the T800 model (Arnold Schwarzenegger) was sent to kill the woman (Linda Hamilton) who would later give birth to John Connor. In T2 the advanced 'liquid metal' T1000 model (Robert Patrick) has been sent back in time to kill the young John Connor. The T800 model has been re-programmed by the resistance movement in the future to come back and protect John Connor in the present. In both movies the machines are winning the war of the future, and

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[212] Hinson. "Movie Review: Terminator 2: Judgement Day" *The Washington Post*, July 3rd, 1991.

John Connor is humanity's only hope. From the moment the T1000 arrives and throughout the movie, it chases John Connor.

The groundbreaking technological advance in CGI created for this movie is the morphing technology that allows the T1000 robot to shape-shift into any form. An example of the morphing technology is the T1000 morphing from silvery metal form to fully clad human without the camera cutting away. The morphing technology employed in *T2* was tentatively introduced in the feature film *Willow*[213] without great success, and while *Willow* was released three years prior to *T2*, the technology had to be basically re-invented as the scenes in *Willow* were fractured and off-coloured compared to the live action footage it appeared in. For James Cameron, making the images appear 'real' to the audience was essential. In a *New York Times* feature Dennis Muren, the visual effects supervisor for *T2,* comments on that importance: "Everyone can tell if something isn't real [...] Once something is unbelievable, you've lost the audience"[214]. This sentiment is shared by Neale, whose concept of 'suspension of judgment'[215] is based on the audience suspending their knowledge of an ontological, Cartesian world, in order to allow for an image to hold true within the realm of the filmic narrative. However, the shift in the rules of what is considered 'real' in the eyes of the viewer only works if the image appears to hold true within the universe of the micronarrative. Fragmented and off-colour images, then, would *not* seem to be a seamless part of the on-screen reality. They would run the risk of being dismissed as 'unreal' if they did not correlate with the rest of the images in the film. Once accepted by the audience as being

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[213] *Willow*, directed by Ron Howard, 1988.
[214] Pollack, "Computer Images Stake Out New Territory", *New York Times*, July 24th , 1991.
[215] Neale. "You've Got To Be Fucking Kidding!' Knowledge, Belief and Judgement in Science Fiction", in Kuhn, ed. *Alien Zone*, 1990 pp. 160-9.

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within the filmic reality, the technology and particularly the digital images in *T2,* gain their power and terror from digital narrative as well as the meta- and micronarrative of the film. The digital narrative deals with the beliefs, discourses and terrors relevant to the digital image, and can be sutured in to either the micro- or the metanarrative, thereby bestowing the image with power. Since the plot of *T2* strikes at the very heart of technophobia, at the conceit that technology will turn against humans, and make them obsolete, it can be argued that the digital narrative of the post-human has been stitched into the micronarrative. This point is further emphasized by the fact that the Terminators are robots, post-human in form and function – bigger, stronger and deadlier than any human.

This particular site of technophobic dystopia had already been established in *The Terminator*[216], a film which creates a base reference for *T2*. A main point of difference between the two films, as seen from a CGI perspective, is that *The Terminator* had no computer generated images, and therefore drew from the power of the technophobic dystopia exclusively to lend power to the story, and naturally to the image of the tactile special effects as a site of employed technology. In contrast, the digital images specially developed for *T2* function as a direct representative of technological advancement with all the awe and terror that goes with it.

The metanarrative surrounding *T2* is concerned with the secrecy surrounding the technology used in *T2* and specifically the morphing technology. The technology was shrouded in a cloak of secrecy which in fact was, according to

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[216] *The Terminator*, directed by James Cameron, 1984.

*Newsweek,* a deliberate strategy employed by the filmmakers to entice the audience of the film:

> The obsessively possessive James Cameron doesn't want anyone to know just yet how he's made such cinematic magic. "We want to keep the mystery alive," says Larry Kasanoff, his partner at Lightstorm Entertainment. "They don't ask Siegfried and Roy how they make the lion disappear." None of this, of course, has anything to do with selling tickets or manipulating continued public fascination with T2.[217]

The lure of the 'secret' behind the technology employed was greatly treasured, and despite several attempts at 'outing' it in several major publications, like the aforementioned *Newsweek* article[218], and a *New York Times* feature two days later[219], the morphing technology remained 'hidden'.

Subsequently *T2* soared to the top of the box office, making more than 180 million dollars more (almost 50% more)[220] than the second summer blockbuster that year: *Robin Hood: Prince of Thieves[221]* starring Kevin Costner. Naturally the box-office numbers do not mean that the audience chose to see *T2 because* of the digital images, but it does mean that the movie and its images were greatly alluring and that the images did not discourage the movie going public.

Since the secret is, according to Baudrillard, the greatest seducer[222], it seems a fair argument that the secrecy surrounding the special effects in the metanarrative at least contributed to the success of the film.

As mentioned, the micronarrative is set in a dystopic future of technological Armageddon. The micronarrative of the film on that account becomes ideal for

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[217] Kaplan "Lights! Action! Disk Drives", *Newsweek*, July 22nd 1991.
[218] Ibid.
[219] Pollack, "Computer Images Stake Out New Territory", *New York Times*, July 24th , 1991.
[220] According to Internet Movie Database (imdb)
http://www.imdb.com/boxoffice/alltimegross?region=world-wide (accessed may 19th 2008).
[221] *Robin Hood*, directed by Kevin Reynolds, 1991.
[222] Baudrillard. *The Ecstasy of Communication*, 1988, p. 66, see also *The Terror of the Post-Human*, pp. 23-9.

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lending power to the digital image, since its own technophobic point of view corresponds directly to the digital narrative. However it seems important to emphasise that technophobic dystopia is in no way exclusive to CGI laden films or indeed the CGI images themselves. Instead, as has already been mentioned in Chapter One, technophobia is a common subject for science fiction films, as it deals with technology and science as a whole and lends power to any such narrative, not just its images. In this particular case, however, the technophobic dystopia does lend both power and terror to the digital image, especially since the digital images are directly linked to the antagonist of the movie, the fearsome T-1000. The T-1000 can use morphing technology, and is therefore a representative of the digital himself. The digital image, then, gains power and terror both from the micro- and the metanarrative of the film.

The narratives of the film are thereby all incorporated in the digital narrative, and serve to lend terror and awe to the digital image. They can reach that goal since the images on screen seem realistic not only in the narrative but in and of themselves. Situational realism is required for the viewer to fully appreciate the image and thereby achieve the sublime, and the image must appear to hold real power in order to pose a real danger to the viewer. The viewer must therefore be seduced into a sensual interaction with the film, either through the different narratives at play, or through a haptic activation of the senses.

Throughout *T2* the aesthetics and feel of the T1000 robot is very much in focus. Shortly after the T1000 is presented as the 'bad guy' in a shootout in the mall with the T800, in which the T800 rescues young John Connor, the T1000 robot stops to look with interest at a silver mannequin[223] so alike to its own

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[223] *Terminator 2: Judgment Day,* directed by James Cameron, 1991, timecode 0:29:02.

liquid metal, thereby providing the viewer with a referent for the T1000. Later the silvery T1000 walks from the burning wreckage of a truck[224] and morphs into the policeman it has been impersonating. Both shots have the T1000 squarely in focus and at the centre of the picture, and present an opportunity for the viewer to truly taste and feel this alien substance. Furthermore several close-ups of the injured T1000 when he has been shot or otherwise hurt also provide an opportunity to sense-feel the surface and the texture of the robot.

**Picture 1: The Liquid T-1000**



In the final fight scene the T1000 robot is frozen in liquid nitrogen and shattered by a shotgun blast. The following close-up of the fragments that slowly melt, and then vibrate before they start to collect themselves into, once more, a fully functional T1000 robot[225] seems a very powerful image of a known, common texture in a completely alien context. This image is also powerful since the T1000, as an agent within the site of the film/viewer

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[224] *Terminator 2: Judgment Day,* directed by James Cameron, 1991, timecode 0:34:12.
[225] Ibid. timecode 1:54:35.

situation, has the power to kill the protagonist, young John Conner, and by extension the entire human race. Furthermore, the robot also seems completely unstoppable as it easily reassembles itself after having been frozen and then completely disintegrated. In the ultra close-up of the reassembling liquid metal, then, the robot reaffirms its status as nigh unstoppable, and the image wakens the senses with its familiar texture and beauty. There seems to be optimum conditions for full immersion as all three of the sense activation techniques mentioned in Model 4[226] are available to the viewer. If the viewer is engaged in the spectacle of the narrative, this moment of the film is a natural climax as it is the final showdown between the T1000 and the T800. The T1000 is coming back to life and its status as nigh indestructible is affirmed. The silvery liquid metal is a powerful visual image, as the chrome-like surface is a natural signifier of beauty, while at the same time being a signifier of society and the 'ugliness' of man-made technology. Finally the familiarity of the liquid metal in its melted form, seen from extremely close up, begs the viewer to engage, to activate the sense memory and participate in the image. Despite the obvious foreignness of a future technology, we have been informed of its textures throughout the film from the silvery mannequin to the familiar metal objects the T1000 forms from its body during the film. Any viewer who knows the texture of melted metal will be reminiscent of it. This image, so enticing to the senses and so climactic to the narrative, seems to be an obvious site of the sublime. The digital function of the liquid metal morphing back into the deadly T1000 serves to remind the viewer of the awe of technology and the deadliness of the T1000, both to the characters and by extension also to the viewer. Furthermore, it is a reminder of the sheer

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magnitude of digital evolution. This image is superior to any images created before *T2* and shatters the expectations of CGI at its time.

The three power-bestowing methods mentioned in Model 4[227] thereby seem to be in play. Not only is the T1000 robot a representative of technology with the ability to erase the human race, but the digital technology employed to make the liquid metal collect and re-form, is in its own right an agent of terror both in the micronarrative as the adversary to John Connor, and the T800 robot. The digital image also becomes a site of power through the digital narrative; it prophesises change and disturbance of the status quo of filmmaking – a post-human cinema as well as the post-human adversary. It invokes the idea of digital evolution which instils the fear of a completely digital cinema. As the human protagonists flee as they now fear even more for their lives, so will the viewers if they are truly immersed in the film.

In the image of the reassembling T1000, where liquid metal flows together and morphs into the police officer skin the T1000 has chosen for itself, is a major leap in digital technology. Several feature articles, as the *Newsweek* and *New York Times* articles mentioned spent several pages trying to explain how this was done, and exactly how revolutionizing it is, how much money was spent, and how many thousands of millions of bytes were needed to create the images of the liquid metal. After explaining the process of putting a filmed image into a computer Andrew Pollack continues:

> Sounds simple enough, yet one film frame – 1/24th of a second – takes up 20 megabytes of computer memory, or enough to write an abridged version of "War and Peace." ILMers count in gigabytes – thousands of millions of bytes.[228]

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[227] See p. 87.
[228] Pollack, "Computer Images Stake Out New Territory", *New York Times*, July 24th , 1991.

The writers of the *Newsweek* article hail Industrial Light and Magic for their involvement in the film, and the new technology employed:

> For Industrial Light, which has won 14 Academy Awards, "Terminator 2" reaffirms its place as the leading special-effects company, with the largest revenues and the broadest range of technology. "I.L.M. has kind of galloped away from the pack," said Don Shay, editor and publisher of cinefex, a riverside, Calif., magazine that covers the special-effects industry.[229]

The technology was truly revolutionary at the time, and that makes the power of the image that much more enticing. All three of the mentioned power bestowing mechanisms seems to be available to the viewer to re-act to, and *T2* with its digital imagery thereby creates a triple layered site of power. In the micronarrative, the T1000 terminator is a site of power as an adversary and a monster, a more deadly model than the T800. The narrative concerns a futuristic dystopia created by robots, and because it is itself digital in form, the T1000 is a site of power within the extra-textual narrative of technological advancement. Also, the digital image receives power from the meta-narrative of critics hailing the technology.

The most frightening aspect of the image of the re-assembling T1000 however, is the 'liquid metal' which also receives power as *function* in digital filmmaking. It is more than the roles it plays in the micro- and meta-narratives of the film. The function of the reassembling liquid represents a new, groundbreaking technology, and as such, is a signifier of the technological future of films and indeed the entire *media* of film. This makes the image of the liquid metal reassembling and the T1000 chasing the protagonists once more, a

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[229] Kaplan "Lights! Action! Disk Drives", *Newsweek*, July 22nd 1991.

prime candidate for the site of the sublime. Naturally this does not mean that it automatically becomes a sublime image, but the conditions are primed for the viewer to delve in and participate in the greatness of the digital image, the sublime.

## It's Bullet Time!

*The Matrix* is also concerned with a dystopic future. Machines rule the earth and humans are consigned to an existence of underground resistance against the machine overlord. The two films also share the plot piece that one human has the power to change the world. While there is no time-travel in *The Matrix*, there is a sense of a current/future dichotomy. *The Matrix* is set in the future, circa 2199, but the humans have been linked up to a digitised world set in 1999 to keep them docile. Humans don't know the current year as they are being kept alive in stasis for the machines to feed on. At a time prior to the starting point in the film, one person had broken free and later liberated others. Since then a small rag-tag group of resistance people have hidden from the machines and liberated as many humans as possible from the 'Matrix', which is the name of the computer generated world designed to keep the people stasis bound. The protagonist Neo (Keanu Reeves) is believed to be 'The One', the prophesised Messiah who can control the Matrix and free the human race. We follow him on his journey from a computer engineer/hacker to his destiny as the fabled 'one'. On this journey he must constantly battle the computer in the form of 'agents' that appear out of nowhere and fight with superhuman strength. The 'Matrix' as the prison of the human mind seems an obvious site of technophobic power. Furthermore, the adversaries in the film are the virtually (pun intended)

unstoppable 'agents', a group of digitally created 'webmasters' of the 'Matrix'. These agents can change the programme at will and appear through any person in the programme, which means that they can be any person at any time. To achieve the effect of the agents morphing out of random people, the morphing technology employed in *T2* had to be developed even further than it was for *T2*. But more impressive than the further development of technology was a groundbreaking new technique that was created to allow for slow motion pans through martial art fight scenes and flying bullets. This new technique was aptly named 'bullet time' and consisted of two motion cameras set in a 360° circle of still image cameras, allowing pans or zooms while real-time was frozen.

**Picture 2: Bullet Time**
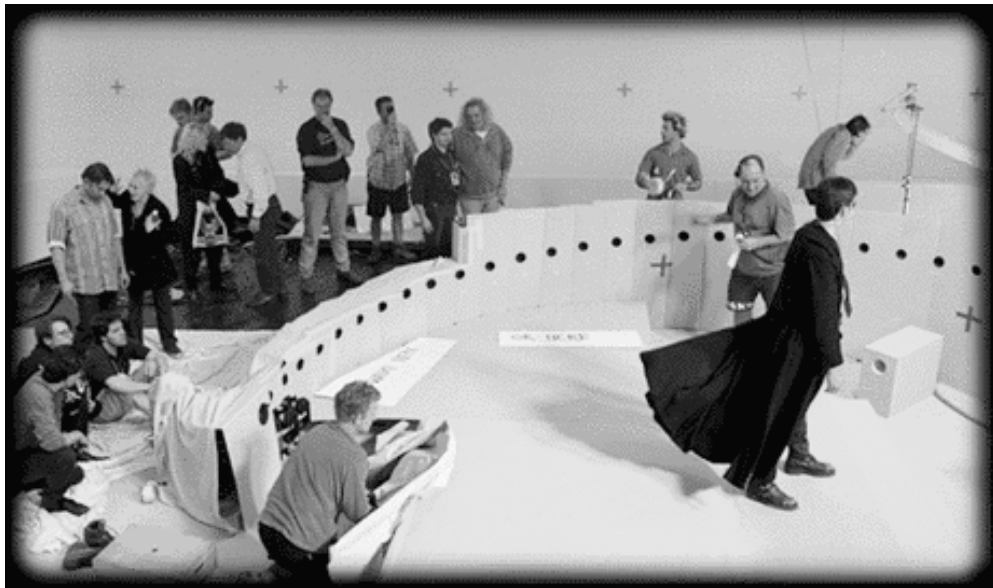


Angela Ndalianis refers to the bullet time technology, which was especially created for *The Matrix,* as 'the frenzy of the visible'[230]; A rollercoaster ride of martial arts, special effects and CGI that she believes is the main reason behind

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[230] Ndalianis. "The Frenzy of the Visible: Spectacle and Motion in the Era of the Digital", in *Senses of Cinema*, issue 3, march, 2000.

the film's success. Ndalianis also explains how the digital special effects in *The Matrix* become an agent of the aesthetic form of 'anime' animation, which the film mimics in live action unlike anything done before. This form of cinema draws attention to the body and becomes a ballet of destruction, where the characters jump impossibly high, across huge divides and spin and swirl through gunfire, explosions and martial arts. This is the frenzy of the visible, and the computer generated images in *The Matrix* are not granted moments of self-reflection or singled out as more spectacular than the tactile special effects; they are a part of a visual rollercoaster ride rather than a ride all by themselves.

However, *because* the digital special effects are such an integrated part of the narrative, and *because* the film is such an effect saturated spectacle, the effects in a way *become* the narrative, to quote Marshall McLuhan once more: "the medium is the message"[231]. This view is perhaps not shared, but still echoed in the opening statement of the *Variety* review of *The Matrix*.

It's Special Effects 10, Screenplay 0 for "The Matrix," an eye-popping but incoherent extravaganza of morphing and superhuman martial arts.[232]

The digital narrative and the micronarrative of the story blend with the framework of genre and medium, creating a style of storytelling that is based on the images and the sensory system of the viewer more than the cognitive understanding of the premise or the micronarrative. The digital image and the digital reality become an interlaced part of the story, and constantly throughout *The Matrix* the viewers are invited to accept a world of digital reality. They are

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[231] McLuhan. *Understanding Media: The Extensions of Man*, 1994.
[232] McCarthy. "The Matrix", *Variety*, March 29th, 1999.

invited to accept characters that dodge bullets, jump from building to building across huge divides and morph from one character to another. All the while we are reminded that while this seems impossible to the mind, it becomes possible if only we believe it to be so. As Morpheus (Laurence Fishburne) explains to Neo:

> 'What is 'real'? How do you define 'real'? if you are talking about what you can feel, what you can smell, what you can taste and see, then 'real' is simply electrical signals interpreted by your brain.[233]

Instead the audience are invited to accept what they experience as real, to suspend their Judgment and immerse themselves in the realm of the Matrix. To be seduced by the film, they must accept the rules of the Matrix; accept that the impossible is possible, and that the unreal is real. They must re-create the physical laws of the universe inside the situation, inside the Matrix, which then becomes simulacrum. Baudrillard explains simulacrum as a copy without a model[234], the Matrix may be a copy of Earth circa 1999, but the people are different, the physics are different, the rules are different - *Reality is different*. It is a post-modern space, a network of situations that are defined by the agents within rather than static laws such as physics or physicality. In the film, the Matrix remains *real*. If you die in the Matrix, you are dead, there are no 'save games', it is real. To enter into the Matrix is to enter fully - body and mind. Aylish Wood suggests that the difference between reality and illusion has collapsed in *The Matrix*[235], that instead of being a dichotomy, illusion and reality become one. To operate freely within the Matrix, Neo has to *believe* he

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[233] *The Matrix*, directed by Andy Wachowski and Larry Wachowski, 1999, timecode 0:39:11.
[234] Baudrillard. "The Ecstasy of Communication", in Foster, ed. *Postmodern Culture*s, 1985.
[235] Wood, "The Collapse of Reality and Illusion in *The Matrix*", in Tasker, ed. *Action and Adventure Cinema*, 2004.

can operate freely, and in order for Neo to be 'The One' in either world everyone has to *believe* he is. If everyone buys into the illusion, the illusion becomes reality, and if no one believes in the reality, reality becomes an illusion.

The plot may be fairly simple, even simplistic. It may be full of inconsistencies or even considered to be plainly bad, but the choreographed thrill of martial arts combined with hitherto unseen special effects not only seduces the audience but leaves them gasping for more.

> While diegetically Neo masters the frenzy of the visible, it is the directors and effects crew who display a mastery of effects that are exhibited for the audience. Reflecting Gunning's argument regarding the exhibitionist concerns of pre- 1908 cinema [1990] the game played by films such as *The Matrix* is one which flaunts film's capacity for magically making a reality out of an illusion. The effects of these films leave us in states of astonishment. An invitation is extended to us to marvel at the speed, special effects, camera work, and ability the cinema has to extract from us a sense of wonder when confronted with these effects. They can envelop us in such real ways, yet in states that are mere illusion.[236]

The audience is seduced fully. As Gunning suggested, the audience is constructed within the film[237], the invitation to participate is so strong that not to seems unthinkable. *The Matrix* is a return (maybe it never left) to the cinema of attractions; the viewers cannot only project themselves into the movie, they are actually constructed inside the film as a integrated part of the spectacle. The narrative of the film becomes about form, about the body and, not least, about reality. However, the seduction into the digital rollercoaster ride can be argued to happen right at the beginning of the film as the bullet time is introduced; an

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[236] Ndalianis. "The Frenzy of the Visible: Spectacle and Motion in the Era of the Digital", in *Senses of Cinema*, issue 3, march, 2000, p. 5.
[237] Gunning, "The Cinema of Attractions: Early Film, Its Spectator and the Avant-Garde", in Elsaesser, ed. *Early Film: Space, Frame, Narrative*, 1990, p.61, also see *The Great Seducer*, pp. 73-9.

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image that, figuratively speaking, becomes the first dip of the rollercoaster that is *The Matrix*.

The groundbreaking CGI in *The Matrix*, is, as has been explained, led by the development of the bullet time effect, created by digitally morphing between still images and live action. Right from the start, as Trinity (Carrie-Ann Moss) fights several police officers this effect is showcased. While Trinity is hanging in the air, poised to kick a police officer, the image freezes, and the image pans around the suspended Trinity until the action starts once more with her finishing her kick and the police officer being flung across the room. A mere three minutes into the film[238], this moment signifies that what we are about to see will entice, amaze and enthral us. The moment becomes a promise of what is to come. We are allowed to dwell on the surreal martial arts, the incredible jump from Trinity as she hovers above the police officer's head in frozen time, while we marvel at the camerawork. The CGI is both a spectacle in its own right, as well as augmenting the spectacle of the martial arts. While everything on screen, the mis-en-scene if you will, is all live action footage, it is the camera itself that becomes digital, the medium of purveying the illusion of film itself becomes an illusion. An illusion of an illusion, twice removed from Cartesian reality, and yet, *there it is*. Everything on screen holds a physical, ontological and even indexical reality, even if it is representing something other than it is, as props and actors do; yet the entire image is so surreal, so otherworldly and so amazingly impossible. As William Merrin remarks:

> ...before the moment is over, the pause is released, and she kicks him across the room into the wall. As visual effects designer John Gaeta explains, "It's slowing down time to such an extent

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[238] *The Matrix*, directed by Andy Wachowski and Larry Wachowski, 1999, timecode 0:03:30.

> that you really see everything around you as clearly as you possibly could" (Gaeta 1999). Or rather, *as you possibly couldn't*: for, in this hyperrealisation of the instant, in this unreal "real time" and its atemporal, omniscient vision, we move beyond human time to that of technology; to the time of the bullet.[239]

In an instant, the viewer, the spectator, the participant becomes digitised. The viewer becomes the machine, the technology. For that second of frozen time, while the viewers swirl through the image of suspended martial arts, they *are* the Matrix. In a haptic physicality the viewer swims through the images and marvel at the foreignness of the familiar, in a dirty and derelict room the overweight policeman and the leather-clad woman is locked in frozen combat. Whether we deem it ugly or beautiful, whether we cheer for the policeman or the woman, it is an emotionally rich set of images that implore the senses to participate. Haptic touch, aesthetic Judgment seems essential and the cinema of attractions seems incorporated in the exhibit, the amazing display of Trinity in bullet time.

So, it seems that the sense activating mechanisms mentioned in Model 4[240] are firmly in place. The sheer novelty and innovation of this new (in 1999) digital technology creates the 'sense of wonder' mentioned by Ndalianis[241]. This entices the audience and bestows the image with power. Furthermore the digital amazement of the camera itself being digitised, and thereby breaking yet another barrier of digital filmmaking, should bestow the image with power from technophobes, as it represents yet another nail in the coffin for real cinema. For technophiles it represents a quantum leap in digital filmmaking, and thereby indicates the future of film. The digitised camera becomes a possible site of the

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[239] Merrin. ""Did You Ever Eat Tasty Wheat?": Baudrillard and *The Matrix*", *Scope online Journal*, May 2003, p. 10.
[240] See p. 87.
[241] Ndalianis. "The Frenzy of the Visible: Spectacle and Motion in the Era of the Digital", in *Senses of Cinema*, issue 3, march, 2000, p. 5.

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truly sublime moment. Naturally, as always, the sublime is in no way guaranteed -- a casual viewer can never achieve the truly sublime unless that viewer is seduced into becoming a participating viewer.

A more obvious site of the digital sublime in *The Matrix* might be Neo dodging bullets in a life and death battle with the embodiment of CGI adversaries, the digitally created agents that can kill in both the physical and the digital world. However, I would argue that at this point in the narrative, the bullet time digital animations have been established as a part of the spectacular rollercoaster ride that is *The Matrix* and that the viewer has become accustomed to the wirework/CGI/stunt/martial arts images to a degree that the digital no longer necessarily holds a special status in the rollercoaster ride. It has instead become part of an experience rather than a site of power in its own right. The sequence with Trinity seems to be a site of immense power and participation.

Despite the many other uses of CGI in *The Matrix* such as the 'sentinels', mechanical octopuses that search for the resistance in the physical world, the morphing of the agents from 'ordinary' people in the Matrix, or the motion blur of ultra fast martial arts throughout the film, I will argue, that, when looking at the audience experiences of magnificent CGI, the introduction of the digitising of the camera in bullet time martial arts seem to be the most ideal site. The form becomes content, and the real becomes an illusion in a ballet of Baudrillard and McLuhan theories set in a post-modern situated world of Lyotard and Habermass where rules are created and disregarded at will in a martial arts language game.

# Chapter Five

## *Digital Creatures*

The second group of films chosen for this thesis concerns CGI as living creatures, or rather as the digital special effects as *form*. The group consists of *Jurassic Park* that introduced the first fully digital creatures, and *Lord of the Rings: The Two Towers*, that introduced Gollum, the first fully digital humanoid creature in a feature film, to interact directly with live actors.

The digital creature exposes the fear of the post-human cinema in the digital narrative, as well as the power it possesses within the micronarrative. The image of the post-human is fraught with uncertainties. The image can signify the super-human, the proto-human, or as is the case in *Jurassic Park*, the pre-human. This instils the micronarrative with a source of power, as the inherent promise of the post-human lingers within the digital image, and that power is transferred to any digitally created creature.

The complete control of the digital image provides a new sphere of power when applied to a creature interacting in the film. When the audience knows that the creature does not need to adhere to any physical laws or limitations, the digital creature gains the implication of being an unknown. Whether the digital image represents dinosaurs or a degenerate post-hobbit monster, the digital nature suggests that the creature is capable of anything. The creature achieves a potential of innate greatness, a post-human, post-technology promise of wonder. It then becomes up to the films to deliver on that promise through the digital prowess displayed on screen.

To believe that an image on screen is "absolutely great" as Kant proposed[242], the image must correlate with a sense of greatness. To create a new form of visual effects to the degree where it completely changes the possibilities of the medium itself, or so terrifically built in to the micronarrative of the film, that digital image thereby achieves the sublime must ultimately be as a result of terror and power.

The terror and power that the digital image contains when displayed can be infused through a metanarrative such as press announcements that promote a certain discourse, as Warren Buckland suggests was done leading up to the release of *Jurassic Park*[243], where several stories the potentialities of cloning were released into the press. Otherwise the digital image can be infused directly through the micronarrative of the film itself, where the image is given the power to directly affect the characters on screen and through them the projected or interacting self of the viewer. Finally, the film can promote the digital narrative and the awesome powers of technology or the post-human, which both frightens and intrigues the audience. This is the tactic that is suggested to be in the interest of filmmakers in order to maintain their position as both purveyors of technology as well as heralding technology's dystopic nature[244].

When *Jurassic Park* was released in 1992, intense speculation on the possibility of cloning dinosaurs in the media[245] instilled the images of the film with a contemporary sense of awe and the fear of dinosaurs once more roaming

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[242] Kant. *Critique of Judgement,* 1951.

[243] Buckland. "Between Science Fact and Science Fiction: Spielberg's Digital Dinosaurs, Possible Worlds and the New Aesthetic Realism", in Redmond, ed. *Liquid Metal: The Science Fiction Film Reader*, 2004.

[244] Arthur. "The Four Last Things: History, Technology, Hollywood, Apocalypse" in Lewis, ed. *The End of Cinema as We Know It: American Film in the Nineties,* 2001.

[245] Buckland. "Between Science Fact and Science Fiction: Spielberg's Digital Dinosaurs, Possible Worlds and the New Aesthetic Realism", in Redmond, ed. *Liquid Metal: The Science Fiction Film Reader*, 2004, p. 26.

the earth to accompany the digital splendours of the film. This speculation set the image up for more direct appreciation from the audience. Later, when *Lord of the Rings: The Two Towers* was released, the media instantly treated the digital Gollum as a digital star and, as will be discussed later, immediately likened him to a human being rather than a hobbit, thereby enforcing and illustrating the discourse surrounding the idea of the post-human cinema.

There is, however, an inherent problem with the perception of the digital creature. When the digital image appears as function, it is immediately apparent and recognisable as a digital image, whereas the digital image as form mimics a physical creature, and the better created it is, the less digital it will seem. So in order to draw on the splendour of the digital image, the image itself needs to be set up *as* digital and the metanarrative becomes paramount to the audience appreciation of the digital creature. Naturally much of the power inherent in the image still stems from the digital narrative, but until the image is recognised as a digital image, it does not come into play and the metanarrative acts as a conductor between the digital narraive and the audience.

The following two subsections will examine the relationship between the form of the digital creature and the audience, and how the sites of the truly sublime are manifested by and through the digital creature.

## *When Computers Ruled the Earth*

> Steven Spielberg's "Jurassic Park" is a true movie milestone, presenting awe- and fear-inspiring sights never before seen on the screen.[246]

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[246] Maslin. "Screen Stars With Teeth to Spare", *New York Times*, June 11th, 1993.

In 1992 Stephen Spielberg released *Jurassic Park*, a film depicting the multi-millionaire John Hammond's (Richard Attenborough) dream of creating a theme park/zoo of living dinosaurs. He has cloned dinosaur blood collected from mosquitoes suspended in amber and created living dinosaurs. Before the park can be opened to the public, however, it needs to be deemed safe by a leading palaeontologist named Dr. Alan Grant (Sam Neill) and a chaos theorist named Dr. Ian Malcolm (Jeff Goldblum). A disgruntled employee named Dennis Nedry (Wayne Knight) dismantles the park's security systems to steal DNA specimens to sell to a competitor. His actions release the dinosaurs, and the Doctors alongside Alan Grant's partner and love interest Dr. Ellie Sattler (Laura Dern) and the grandchildren of the millionaire Lex and Tim (Joseph Mazello and Ariana Richards) must find their way back to the central building of the park, fighting several dinosaurs along the way – from the majestic T-Rex to the devious and deadly Velociraptors.

Spielberg alternated between digitised images when the dinosaurs were in motion and animatronic dinosaurs when they were static, which allowed the actors to touch and interact with the dinosaurs up close, while allowing the fully digitised dinosaurs to roam free when they are not directly interacting with the actors. The effect was believable dinosaurs running, fighting *and* interacting with the live actors, which had, up to this point, seemed impossible to achieve. Despite repeated use of animatronic dinosaurs in physical interaction with the actors, it seems important for Spielberg to accentuate that this film is not just about dinosaurs being brought back to life; it is also about man versus machine, about the danger and attraction of digital animation versus the physical presence and limitations of live actors.

The digital narrative, then, is not only a part of the narrative, it *is* the narrative. While fearing the dinosaurs/technology the characters/actors display a constant fascination with the subject of their fears. The digital dinosaurs are introduced 20 minutes in the film when Dr. Grant and Dr. Ellie are taken into the park, and, during a richly orchestrated scene, they walk, mouth agape, towards the towering creatures. The first shot of the dinosaurs is over the shoulders of the two doctors, and while the music is still playing, Dr. Grant points and exclaims "It's a dinosaur"[247]. The effect of the living breathing dinosaurs *as* digital masterpieces is introduced through great ceremony. Never before had completely 'organic' and fully digitised creatures been seen on the screen, and furthermore these digital creatures dominated a large amount of the screen time in the film compared to *T2*, *The Abyss* or any other CGI in earlier films.

This naturally dominated the metanarrative surrounding the film, and the *New York Times*[248], Roger Ebert[249], the *BBC*[250] and the *Washington Post*[251] all celebrated the special effects. The critics claimed that the digital images in *Jurassic Park* were not only a sure-fire ticket seller, but a milestone in special effects and movie making in general. The dinosaurs in Spielberg's film were a fantastic sight to behold, and the metanarrative became a buzz of digital admiration. The media was saturated with stories of the technology of bringing dinosaurs back, thereby creating a double layered technological metanarrative, and lending an implication of reality or possibility to the digital dinosaurs.

Naturally when digitally created creatures are employed as the main antagonists the audience will have to accept them as 'real' for the purpose of the

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[247] *Jurassic Park*, directed by Steven Spielberg, 1993, timecode: 0:20:29.
[248] Maslin. "Screen Stars With Teeth to Spare", *New York Times*, June 11th, 1993.
[249] Ebert. "Jurassic Park", *Sun Times*, June 11th, 1993.
[250] Haflidason. "Jurassic Park", *BBC Online*, October 20th, 2000 .
[251] Howem. "Jurassic Park (PG-13)", *Washington Post*, June 11th 1993.

narrative for them to have any effect, and the very positive reviews of the CGI in *Jurassic Park* seems to suggest that the audience did indeed accept the dinosaurs as real for the purpose of the narrative.

*Jurassic Park* also had the digital narrative sutured within the micronarrative of the film itself to create a site with an implicit language game of evolution, technology and digital distinction, as well as digital terror. This assignation of power creates an interaction between film and audience, where the viewer is encouraged to accept the terror and magnificence of the digital monsters. Therefore, one of the reasons why the digital images were so well received by the viewers could be argued to be the constant reflection on, and references to, the technology discourse. This constant self reflection incorporates the digital narrative in the micronarrative. In the first scene that involves Dr. Grant at an excavation site, there are several dialogue exchanges that illustrates the film's self reflection on the digital narrative:

**Dialogue 1:**[252]
*Dr. Grant:*          I hate computers.
*Ellie:*             The feeling is mutual.

…
**Dialogue 2:**[253]
*Computer tech:*    This new program is incredible. Two years more development and we won't even have to dig anymore.
*Dr. Grant:*          Where is the fun in that?

…
**Dialogue 3:**[254]
*Ellie:*             He touched it. Dr. Grant is not machine compatible.
*Dr. Grant:*          They have it in for me.

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[252] *Jurassic Park*, directed by Steven Spielberg, 1993, timecode: 0:06:21.
[253] Ibid., timecode: 0:06:52.
[254] Ibid., timecode: 0:07:17.

These lines of dialogue are the first of many self reflexive exchanges in the movie, illustrating correlation between the computers and the dinosaurs.

The second exchange listed above shows the dichotomy between actors and the digital evolutionary myth[255]. Sam Niell portrays the archaeologist faced with the prospect of not being needed to dig, just as the actor is being faced with the prospect of not needing to act, and the answer both the palaeontologist and the actor gives is: "Where is the fun in that?"

The first and the second exchange seem to be direct references to the upcoming struggle between Dr. Grant and the computer generated creatures he will face. Despite a rather tame pay-off as the park's computer system is disabled while Dr. Grant is behind the wheel of the vehicle, he immediately utters: "What did I touch?"[256]. The struggle between Dr. Grant and computers is about to become exceedingly more serious as he shortly thereafter encounters the T-Rex in all its digital glory[257]. However, the film's micronarrative self references does not stop with the excavation scene. In a further reference to the digital advances and the evolutionary myth of CGI, the three main characters of the film have an interesting exchange after the first encounter with the real, live, digital dinosaurs:

**Dialogue 4:[258]**
*Ellie:*           So, what do you think?
*Dr. Grant:*       That we are out of a job.
*Dr. Ian Malcolm:*   Don't you mean extinct?

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[255] See *The Terror of the Post-Human*, pp. 23-9.
[256] *Jurassic Park*, directed by Steven Spielberg, 1993, timecode: 0:53:40.
[257] Ibid., timecode: 0:59.33.
[258] Ibid., timecode: 0:22:24.

This dialogue takes part in the discourse surrounding the dichotomy between the live actor and the digital image, and while it does not judge either the actor or the digital image to be more important, or more prudent in filmmaking, it does illustrate and accentuate the same dichotomy. As Paul Arthur noted it is entirely in the film's self interest not to judge one as better than the other, but to accentuate the dangers of technology, while positioning film as a pioneer of same[259]. The scientists of the narrative and the actors portraying them are in similar circumstances. While exited about the new technology in their field, they fear becoming extinct, unneeded and unwanted, while the spectators can choose to root for technology/dinosaurs or actors/scientists as they please.

While the scientists alongside the millionaire John Hammond and his lawyer are sitting in an amusement park-styled ride that shows the laboratory where scientists are working with computers, the lawyer turns to John Hammond and asks:

**Dialogue 5:[260]**

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|---|---|
| *Lawyer:* | This is amazing, John. Eh – are these characters auto-eh-erotica? |
| *John Hammond:* | No no no, we have no animatronics here, no. Those people are the real miracle workers of Jurassic Park. |

The joke of the scene, is that in trying to say 'animatronics' the witless lawyer accidentally says 'auto-erotica' [masturbation], but self-referentially John Hammond is explaining to the viewer that the creatures of *Jurassic Park* are not mere animatronic contraptions, but fully digitised creatures, and that the lab techs/computer engineers are the reason this park/film could ever exist.

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[259] Arthur. "The Four Last Things: History, Technology, Hollywood, Apocalypse" in Lewis, ed. *The End of Cinema as We Know It: American Film in the Nineties,* 2001.
[260] *Jurassic Park*, directed by Steven Spielberg, 1993, timecode: 0:26:01.

Alongside the sutured digital narrative of man versus technology is the micronarrative of the film, which presents the children and scientists trying to escape the dinosaurs. In order to accomplish this task they must escape two separate adversaries, namely the majestic, but huge and unsophisticated T-Rex, as well as the small, clever and devious Velociraptors. Despite the havoc and mayhem caused by the T-Rex to the park it seems surprisingly easy for the protagonists to escape from it. In one instance the T-Rex is distracted by an emergence flare, which allows the protagonists to escape while it is busy devouring the hapless lawyer[261]. In another instance they simply outrun the T-Rex in a Jeep[262]. While certainly being awe inspiring and fearsome, the T-Rex poses more circumstantial danger of being caught in the wreckage caused by the T-Rex, than a direct danger to the protagonists. This allows the T-Rex to be a fearsome and majestic representative of digital technology, without actually being inherently evil. Naturally, the lawyer killed by the T-Rex is not portrayed as a likable protagonist, but rather a representation of greed and cowardice, the cowardice in the end being his downfall as he abandons the children to hide in a lavatory which the T-Rex subsequently demolishes. The Velociraptors, instead, are the real 'digital evil'; they hunt mercilessly and possess intelligence and cunning. From the very first scene of the film that shows a park attendant being eaten by the unseen Velociraptor, through the feeding scene where the [again] unseen Velociraptors kill, maim and devour an ox in seconds[263], they represent the hidden digital terror, and the protagonists are faced with a constant worry that the Velociraptors' fence should be off-line and the digital terror will escape. When, more than an hour and a half into the film, the viewer is finally faced

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[261] *Jurassic Park*, directed by Steven Spielberg, 1993, timecode: 0:59:33-0:03:55.
[262] Ibid., timecode: 01:17:51.
[263] Ibid., timecode: 0:30:48.

with the devious and dangerous Velociraptors that are hunting their captors[264], a thrilling hunt ensues. The protagonists must constantly hide or run until they finally reach the supposed safe haven of the control room. However, the Velociraptors find a way into the control room and the humans must try and escape into the crawlspace above the lighting. The Velociraptor stands up, and in a marvellous self referential image, the adversary that the protagonists have struggled to escape for 15 minutes of uninterrupted flight, is bathed in the glare of a projector displaying the genetic codes the scientists have used to create the dinosaurs.

**Picture 3: Velociraptor**



A genetic code that looks remarkably like the computer codes that make up a digital image[265]. Throughout the film the danger and deadliness of the Velociraptor as well as the digital image has been set up as immensely powerful forces, and in this one image, the Velociraptor shows its true colours as a digital menace, and in a moment of micro- and macronarrational ecstasy the digital image (ironically portrayed by an animatronic dinosaur) has entered into

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[264] *Jurassic Park*, directed by Steven Spielberg, 1993, timecode: 1:39:34.
[265] Ibid., timecode: 1:49:26.

the very heart of the park and by extension into the heart of film itself. No longer are the digital images mere caged attractions, but they have sent the humans running, and there, in the control room, the heart of operations the digital image stands proud in all its hyperreality.

The digital images become powerful and dangerous as a creature within the micronarrative. Embodied as powerful and advanced technology in and through the metanarrative. The images become powerful and dangerous through the digital narrative in the control room reflected by their own binary code. Foreign yet familiar as a creature that, despite being separated from man by 65 million years, is scaly and animal like. The images enthral the senses in haptic touch, while the terrific vision of the scaly adversary bathed in the digital equivalent of primordial soup is an image of attraction that begs the audience to make an aesthetic Judgment. Furthermore the image is seducing the viewer on multiple levels as both the thrill of a deadly adversary, the excitement of terror of technology and as the subject of fear that leads to the thrill of flight; this image, if any, embodies the site of the sublime.

Yet, the protagonists are still on the run. The climax of the illuminated Velociraptor in the control room does not conclude the micronarrative and no final climax of the micronarrative have been reached. The final pinnacle of *Jurassic Park* arrives a few minutes later as Dr. Grant and the children seem trapped between two Velociraptors on the entrance floor of the visitors centre. Unable to escape the deadly foes, they huddle together and prepare for fight as flight is no longer an option. Suddenly, the hulking T-Rex appears out of nowhere and swoops up a Velociraptor in its jaws, allowing the protagonists to flee in the nick of time. A ferocious battle ensues between the digital adversary,

the devious Velociraptor, and what now turns out to be a saviour in the form of the majestic digital T-Rex, a battle that leaves the T-Rex victorious, accompanied by heroic trumpets and roaring its victory for the world to hear.

**Picture 4: Victorious T-Rex**



In that final climax with the T-Rex roaring, standing amidst the rubble of dinosaur bones and with a banner reading "When Dinosaurs Ruled the Earth"[266], the viewer sees that the digital image can be a saviour as well as an adversary, and that the unlikely hero not only *ruled* the earth but *rules* it. No masturbation of animatronics here, no past tense, and no mere bones of a skeleton. The real life digital image is roaring its victory standing 30 feet tall in its own little banner parade, accompanied by trumpets, as only Spielberg could orchestrate. Evil or not, dangerous or not, there stands a digital giant. The T-Rex in the final climax becomes another site of sublimity, not only as great, majestic, saviour and digital, but also as fearsome and powerful beyond comprehension. Power is bestowed on several levels, senses are not only activated but tingling with haptic delight as the digital roars its victory.

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[266] *Jurassic Park*, directed by Steven Spielberg, 1993, timecode: 1:52:30.

## *A Post-Hobbit Future*

Unlike the other films chosen for analysis in this thesis, *The Lord of the Rings: The Two Towers* (*LotR 2*) is set in the fantasy genre rather than the science fiction genre. Furthermore *LotR 2* deals with several separate storylines that does not merge until the third and final film in the trilogy, *The Lord of the Rings: Return of the King*[267]. As such the image of the digitally created Gollum (CGI created, voiced by Andy Serkis) has no direct interaction with protagonists from other storylines until the third film. For the purpose of this thesis I will disregard these storylines. Instead I will focus only on the storyline of Gollum, separate from the others. Having escaped from the evil country of Mordor in the first film (despite never being seen in the first film), Gollum is set on retrieving his 'precious', his ring, and seeks out the hobbits that carry it. As he reaches them, however, Frodo explains that he knows of Gollums past as a hobbit, and that he accepts him despite his grotesque appearance. Gollum is then faced with the dilemma of either befriending the hobbit who finally shows him acceptance or deceiving them to retrieve his precious. As the film is set in a fantasy genre rather than a science fiction genre, the manner in which the digital image relates to the narrative of the film is affected[268]. Science fiction deals directly with science and technology as a catalyst for a dystopia or utopia in a possible future or modal reality. It encourages its audience to apply any technophobia or technophilia straight to its narrative and engage with the film in a pre-determined context of technology. Fantasy, on the other hand, has a different

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[267] *Lord of the Rings: The Return of the King*, directed by Peter Jackson, 2003.
[268] See *Storytelling by the Digital Campfire,* pp. 41-5

context, and despite the genre being a mirror of society, the adventure genre is veiled in an alien milieu and any analysis of the narrative must be cognitive and post-reaction. Instead the fantasy genre deals directly with emotions such as fear or estrangement or with traits such as honour or mental strength. It draws from genres such as the bildungsroman or the coming-of-age genre, and from fairytales.

The digital image, in the immediate reflexive and pre-reflexive interaction with the viewer does not, therefore, draw power or intensity directly from any framework surrounding the genre. It has to rely on the miconarrational setting and the inherent potential therein. The power of the digital image must come either from the digital narrative, from the micronarrative itself, or from a metanarrative of knowledge about the making of the film. When discussing the digital impact of CGI in *Lord of the Rings: The Two Towers* it would seem only natural to focus on some of the many other digital images, such as the epic fight scene at 'Helms Deep'[269] or even the fight scene between Gandalf (Sir Ian McKellen) and the fire demon[270]. However, while they may be a site of the sublime in relation to the fantasy epic, and are certainly displaying the latest in CGI at the time, they are not, in their own right, a site of the digital sublime to the uninitiated viewer in the sense that they are not easily recognisable as groundbreaking CGI if the viewer has no prior knowledge of it being so. The creature Gollum, on the other hand, has not only been widely anticipated in the media frenzy surrounding the film as a CGI creature, but also imposes such animated detail as to be easily recognised as revolutionary digital special effects. This is an opinion shared by Roger Ebert:

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[269] *Lord of the Rings: The Two Towers*, directed by Peter Jackson, 2002, timecode 02:05:49.
[270] Ibid., opening scene.

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"The two Towers" is a rousing adventure, a skilful marriage of special effects and computer animation, and it contains sequences of breathtaking beauty. It also gives us, in a character named the Gollum, one of the most engaging and convincing CGI creatures I've ever seen.[271]

Gollum is singled out as not just a part of the adventure, or the 'skilful marriage of special effects and computer animation', but rather as unique in his own digital right. That the creature Gollum is such a breathtaking digital achievement even changes the very genre of the film according to Stacey Abbot[272], who suggests that the central role of what she calls the 'hyper-real cinematic cyborg' creates a hybrid genre of fantasy/science fiction. Abbot uses the term 'cinematic cyborg' to emphasise that the image was created by adding the digital image to the live-acting of Andy Serkis thereby uniting man and machine. However, for the purpose of examining the audience experience and site of the sublime, the method of creation is irrelevant to the image on screen, which is purely digital. I will therefore refrain from using the term 'cinematic cyborg' to avoid confusion. Abbot further raises the interesting point of Gollum crawling up and down cliff walls, being physically twisted in a way that cannot be achieved by an actor and in many senses is *more* than real[273].

The hobbits, in many ways represent humanity more so than the actual humans in *The Lord of the Rings* trilogy, in the sense that they are ordinary everyday people put in an unfamiliar situation, rather than warriors and hunters as most of the humans in the trilogy are. Gollum was a hobbit long ago, but has been twisted by the ring, both physically and mentally, to a point where he no

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[271] Ebert. "Lord of the Rings: The Two Towers", *Sun Times*, December 18th , 2002.
[272] Abbot. "Final Frontiers: Computer-Generated Imagery and the Science Fiction Film", in Evans, ed. *Science Fiction Studies*, vol. 33, part 1, 2006.
[273] Ibid., pp. 103-4.

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longer resembles a hobbit at all, but an animal-like creature. He is, in a sense, post-hobbit, what is left centuries after the hobbit part of him died away and, by extension, he represents the post-human. Gollum is introduced very early on in the three hour epic in an image that truly captures both the evil and the post-hobbit nature of the creature. Scaling down a sheer cliff wall towards the sleeping hobbits Frodo (Elijah Wood) and Sam (Sean Astin), muttering "They are thieves, they are thieves, they are filthy little thieves"[274], his ragged strands of hair flowing in the wind and outlined against a crescent moon, Gollum stalks his prey. Moving fluidly, the light of the moon shining on his pale, almost translucent skin, muscles and sinews flexing as he tries to find holds on the bare cliff, Gollum is truly a digital sight to behold. Gollum is no Tyrannosaurus Rex, no Velociraptor, or killer cyborg from the future. He has very little strength and is quickly overpowered by the hobbits as he attacks them, leaving him crying and pleading on the ground. He is, as Elvis Mitchell from *The New York Times* remarks "...a hissing, bitter child-man whose paranoia keeps him breathing, and plotting"[275].

Perhaps it is *because* Gollum is such a despicable and pitiful creature that his appearance and inner turmoil is that much more troubling. He is in a sense us, humans, people when all that is good and humanlike is stripped away. He is a bundle of insecurity, vengeance and spite trapped in a shell of a body, and reduced to wearing rags and eating raw flesh. Outcast from society and incapable of proper social interaction, diseased and scarred, he is the post-human, the hermit and the nuclear holocaust survivor.

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[274] *Lord of the Rings: The Two Towers*, directed by Peter Jackson, 2002, timecode 00:06:40.
[275] Mitchell. "Film Review; Soldiering On In Epic Pursuit Of Purity", *The New York Times*, December 18th, 2002.

The viewer learns of Gollum's hobbit past as Smeagol early in *LotR 2* as Frodo explains to Gollum that not only does he know of his past, but urges him to remember that he is actually still Smeagol[276]. Gollum's eagerness to befriend the ringbearer Frodo, whom he refers to as 'master', infuses his character with some depth as he reveals that not all of his 'hobbitness' has gone. This sets up the dialogue Gollum has with himself, as his two personalities, the twisted and evil Gollum and the naïve and kind Smeagol, fight for the supremacy of his

**Picture 5: Smeagol and Gollum. (Gollum on left)**



body[277]. The exchange takes place with Gollum/Smeagol turning his head one way when he is speaking as Gollum, and the other when he is speaking as Smeagol. At first the camera pans around the schizophrenic creature and shows that there is indeed only one 'physical' body in this dialogue, but then cuts between the two debating entities trapped in the same body (see picture 5). The scene is carnal and vivid as spittle flies from Gollum's mouth, and the wide eyed Smeagol urges Gollum to leave. The debate ends with Smeagol banishing Gollum from his body. The camera pans back to the 'Gollum position' but Smeagol is still in charge, and both Gollum and the viewer know that Gollum is no longer a part of the creature. In this scene the creature Gollum/Smeagol goes through a range of 'human' emotions and shows off the spectacular digital

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[276] *Lord of the Rings: The Two Towers*, directed by Peter Jackson, 2002, timecode 00:36:49.
[277] Ibid., timecode 01:10:38.

mastery that has gone into *LotR 2*, from saliva spewing from the twisted Gollum, as he spits his nasty remarks, to the wide eyed and aloof expressions of the more amiable Smeagol. As the scene draws to its conclusion, and Smeagol dances his dog-like dance of victory, the viewer has gone through the same range of emotion as the wretched Gollum. In this image, the sheer magnificent achievement of the digital creature becomes not just apparent, but put on display as an exhibit of mastery. It is not merely a great hulking animal or a liquid surface, but a humanoid displaying true emotion. Our post-apocalyptic selves, stripped of humanity, generated in a computer, and put on display. With almost translucent skin, scarred through whipping, and twisted through decades if not centuries of solitude and confinement, the body of Gollum is if anything, foreign yet familiar and we are drawn to it, our haptic senses tingling. Whether the viewer deems the warped body to be beautiful or ugly it seems impossible not to feel that one or the other concepts apply. The scenes become an obvious site of the sublime as the viewer is drawn to its carnality and astonished by its effects. Throughout reviews this scene is constantly hailed as *the* scene of the movie. Case in point is this excerpt from Peter Travers of Rolling Stone Online:

> The effects astonish, none more so than Gollum, a computer-generated creature, hauntingly voiced by Andy Serkis. Gollum looks like a wasted junkie and speaks (with a rasp to rival Linda Blair's in *The Exorcist*) of the ring that corrupted him as "my precious." The battle between good and evil in this character catches the soul of the movie.[278]

Perhaps not only the soul of the movie, but arguably the soul of the viewer, and that is where the image gets its power. For some viewers, such as the most

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[278] Travers, "The Lord of the Ring: The Two Towers", *Rolling Stone Online*, January 2nd 2003.

passionate technofetishists and technophobes, the sheer technological achievement contains power enough to achieve the sublime, as it represents something that to them is far greater than themselves, and has in it an inherent terror, however exciting. For others, Gollum reflects humanity: not reflectively in the post-cognitive sense, but in the sense of looking in and seeing the inner Gollum look back. Post-hobbit in form and post-human in nature, Gollum is not a metaphor of the post-industrial secularised human, but rather a direct reflection of the fears, jealousy, and spite we all carry within. Gollum has no physical strength and cannot kill the protagonists or the viewer in a battle. He carries no weapons and has access to no armies. He is, in a sense, harmless. However, he is scheming, untrustworthy and spiteful, and the danger he represents is the danger of Frodo to turn into a version of Gollum through the corruptive powers of the ring. Also, more directly, the image represents the danger of corruption and jealousy being the downfall of the protagonists and, by extension, the viewer. The image of Gollum carries with it both the power of the digital creation, the awesome realisation of humanoid emotions and also the power of the scheming Gollum, but perhaps most importantly the image carries with it the power of the post-human. The power and shame of everything rotten and deceitful about the viewers themselves. A site of the sublime on not just a narrative level, but on a personal level. Gollum is so believable and so recognisable as humanoid as to lend credible weight to the myth of digital evolution as well as strengthen it through the image of the warped digital creation looking back from the wretches of the human soul.

# **Conclusion**

This thesis has suggested that in order for the digital image to become a site of the sublime it must contain the potential to be both carnal in its sensory speculation, and terrifyingly powerful in its limitless reach. The digital image offers the viewer a fully immersive and yet out-of-body/mind experience, and through its capabilities heralds the death of cinema and the birth of the post-human.

The understanding of the digital sublime moment has been made in relation to the post-modern condition. As the 'situation' has become an autonomous network, governed by language games, the perception of reality has changed. Items, people and ideas have altered from having objective value in terms of the world, to only having value in terms of the situation. Furthermore, post-modernity has changed the role of the individual from one in which they participated either in the public or private sphere, to one where those spheres have collapsed and reconfigured into a new public sphere, defined by mutual consumption. Every object and every person become agents of the situation, where value and meaning is only gained through interaction, and the meaning generated becomes not just reality, but hyperreality.

The concept of situational ontology, introduced in Chapter Two, makes use of hyperreality and situational reasoning to illustrate how agents of post-modernity understand reality. I have established through these theories that the audience perceive the digital image through situational ontology, which, in turn, serves to convey the potential reality of the digital image to the viewer. I can therefore

conclude that by union of the post-modern and situational ontology, the digital image does indeed contain a *potential* truth.

For the image to become *carnally* and *physically* true, however, the audience needs to be seduced, or convinced, of its reality. The digital image contains no objective physical reality, and for the viewer to activate their body memory and delve into the image, they must be persuaded to do so. During this thesis I have examined three such examples of seduction. The first, the aesthetic, beckons the viewer to activate their body memory by displaying an image that correlates to a sense of extreme beauty or ugliness. An intriguing image in terms of beauty or ugliness will draw the viewer to experience it first hand such as the post-human Gollum in *Lord of the Rings: The Two Towers*. The concept of the 'intriguing' image is also present in the second seduction technique, haptic vision. Through the theories of Laura U. Marks and Vivian Sobchack I have established how the digital special effect entices the viewer to participate bodily in the image: how the physical sensation of the digital image can be particularly exquisite and powerful.

The final seduction technique used to establish carnal truth is the cinema of attractions. The digital image is often an indicator of the fantastic, and not just intriguingly foreign or beautiful, but spectacular and breathtaking. CGI is used to portray images that cannot be filmed by traditional means. This is exemplified in *The Matrix,* where the technique of bullet time completely revolutionised the medium itself and became an obvious site of the sublime because its limitless digital dance had the potential not only to render one speechless, but to truly amaze and enchant the viewer.

I have argued that if the viewer is completely seduced by any one of these techniques and partakes fully in the situation and the network between digital image and viewer, the viewed gains a physical and carnal reality. As such, the image itself becomes indisputable truth to the viewer, and by extension an ontological, objective truth.

It is not enough, however, for the image to contain carnal reality. In order to allow the viewer to achieve the awesome feeling of the sublime moment, the image must also contain great power. I have argued that the digital image inherently contains two sources of great power through the digital narrative.

The digital image, because of its status as the most advanced technology used in cinema, becomes an indicator of the future of cinema, and by extension, the death of cinema present. As cinema progresses and new technologies arise, the medium changes, and technophobes argue that the current medium dies. Whether this is true or not is irrelevant as the apocalyptic discourse remains in circulation, adding power to the image. The digital image, then, becomes in and of itself the source of the death of cinema, and gains the obvious power that goes with that title. This source of power is especially significant when examining the digital image as function. In *The Matrix* and *T2*, therefore, the discourse of CGI prophesising the death of cinema becomes an intrinsic supply of power, and part of the discourse surrounding the films release and reception.

Furthermore, I have argued that the evolutionary component in the digital image stimulates the discourse that the technology will one day produce a fully digital actor. This actor will be post-human simulacrum, a copy without a model. I have established that the fear of the post-human has always been a part of film, and that much science fiction deals with it. I have also argued that both

*Lord of the Rings: The Two Towers* and *Jurassic Park* provide a dystopian image of the post-human.

There is, however, a third source of inherent power in the digital image. Technophiles regard the digital as a representative of great human achievement in the form of applied technology. Furthermore, these achievements become indicators of a better tomorrow. The evolution of CGI, therefore, becomes an indicator of utopian promise and dystopian Armageddon. By extension, the digital narrative represents a potential source of greatness as well as terror.

Each unique source of power inherent in the digital image takes part in the digital narrative. To truly appreciate the digital image's power, therefore, the viewer must belong to one of two groups. Either the viewer must belong to the group of technophobes that fear technological progress and disruption of the status quo, or to the group of technophiles that view technology as prophesising a utopian tomorrow. As I have argued, the individual films will often attempt to accentuate the sense of technology as being a source of either utopian or dystopian power. Whether the viewer is delighted or frightened by the image, the power seduces them. Paul Arthur supports this argument.

There is another source of power in the digital image. This source, however, is not inherent. Instead, it is bestowed directly by the micro- or metanarrative of the film. Through my observations of the four films analysed in Chapter Four and Five, I have argued several different infusions of power through the narrative.

In *Jurassic Park*, the micronarrative of the film makes constant self-referential remarks concerning the dinosaurs *being* the digital image. This bestows both the dinosaurs in the movie with the inherent power of the digital image, and the

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digital image with the power of the dinosaurs. In *Lord of the Rings: The Two Towers* the metanarrative surrounding the film is saturated with stories of the technological marvel that is Gollum, and even if the viewer does not experience technophobic or technophiliac feelings, when faced with the deformed Hobbit, it is clear that this is meant to be seen as a revolutionary new technology involved in producing the alchemy before their eyes. The image is thereby infused with meaning and power by the metanarrative, and the micronarrational power of the image is heightened as Gollum becomes a representative of the cinema of tomorrow, even if the viewer has no developed understanding or appreciation of the technology.

In *T2* the secret of the technology reported by the press made the image of the liquid metal that much more 'special'. The foreignness of the image was infused with the seduction of the secret, granting power to the image. The aesthetics of the image became more than just a haptic seducer; it became the limitless potential of the digital image to the uninitiated.

I feel that I can reasonably conclude, then, that not only *can* the digital image be real, and not only *can* it contain power, but that the potential power and reality contained in the digital image is at least as great as any other image.

Furthermore**,** I can conclude that through the seduction methods specific to the digital image, it becomes an optimum site of the sublime; an obvious showground for technology and narrative; and an obvious seducer of the audience and purveyor of specialness. If used in a way that seduces the viewer, the digital image contains a greater potential for terror and awe than any other image since it does not have *any* boundaries, yet at the same time *can* contain all the same qualities as a non-digital image.

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**Final Remarks:**

**Further research:**

This thesis has largely been a theoretical discussion of sensory perception, and of how the viewer experiences the sublime when faced with the tremendous power of the digital image. Further research could extend into ethnography to ask real viewers about their personal experiences of the digital image. It could also be helpful to the understanding of film/viewer relationship to examine negative examples of potential sublime images, such as *The Lawnmower Man*[279] or *The Polar Express*[280] which were hailed as digital wonders, but, if box office success and reviews are valid parameters, failed to enchant the audience. Finally, it could be beneficial to do a comparative study of, for examples, novels, poems, paintings, and perhaps even physical images such as landscapes, in order to better understand the heightened carnal/visceral nature of the digital sublime moment.

**The Next Step:**

James Cameron, who has been at the forefront of digital special effects since he wrote and directed *The Abyss*, is currently working on a project called *Avatar*[281]. This film is employing new technology that enables 3-D digital actors to interact directly with live actors. This new technology requires theatres to install new 3-D projectors so that the digital creatures can be viewed from different angles simultaneously. Furthermore, new facial expression software is supposedly going to allow digitally created actors to look more human than ever

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[279] *The Lawnmower Man*, directed by Brett Leonard, 1992.
[280] *The Polar Express*, Robert Zemeckis, 2004.
[281] Avatar, directed by James Cameron, scheduled for December 2009.

before. The promise of this film seems to be to partake in both parts of the digital narrative. The function of the digital 3-D images promises to revolutionise cinema and thereby drive another nail into the coffin of traditional cinema, while new digital actors are another step on the road to post-human cinema. The digital narrative lives on, and on, and on….

**My Personal Sublime Revisited:**

When I, at the age of 14, went to see *The Abyss*, I was neither 'for' nor 'against' technology. To be perfectly honest I hadn't given it much thought and up until that point I hadn't been forced, by either the press or Quentin Tarantino, to take sides in this reductive debate.

The narrative of the film captured me, sure, but so had many other narratives before that, and I no longer remember those films so vividly. Being captured by the narrative, however, positioned me for what I was about to experience. The pseudopod came on the screen and I lived the experience, partaking in the action, emptying myself of the language that held my existence together. But that wasn't the sublime moment at its end. What was, was when I felt that now *everything* was possible. I could no longer imagine any boundaries for film, and I knew that I, at that exact moment, was a part of the future. My own insignificance was as powerful as anything I had felt before - the image was *truly* great, and I remain in its power to this day.

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