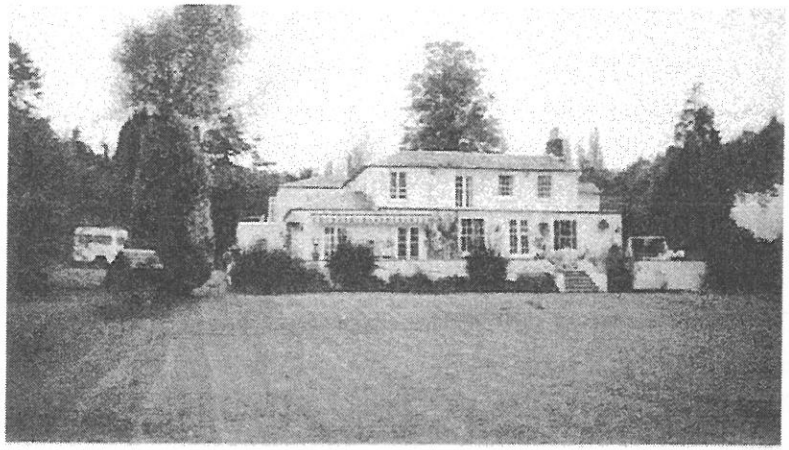
thank them all as well as David C. Smith, a useful correspondent and the editor of Wells's collected letters.



Jonathan Bignell

Another Time, Another Space: Modernity, Subjectivity, and *The Time Machine*

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H.G. Wells's science fiction novels have long been attractive to filmmakers. Film versions include *The Island of Dr Moreau* (Erle C. Kenton 1932 [titled *The Island of Lost Souls*], Don Taylor 1977, John Frankenheimer 1996), *The Invisible Man* (James Whale 1933, sequels Joe May 1940, Ford Beebe 1944), *Things to Come* (William Cameron Menzies 1936), and *The War of the Worlds* (Byron Haskin 1953). I want to focus here on Wells's short novel *The Time Machine*, first published in 1895, and the film adaptation

directed by George Pal (1960).[1] *The Time Machine* does feature strange creatures, but not aliens in the usual science-fiction sense. The central character, unnamed in the novel but called George Wells in the film, is a late nineteenth-century inventor who constructs a sled-like vehicle enabling him to travel into the future. In the year 802,701 the Time Traveller discovers two races of humanoids, the Eloi and the Morlocks. In the novel the frail and childlike Eloi seem to be the passive and effete descendants of the elite of an advanced society, living in a sunlit paradise on the surface. The Morlocks appear to be the ape-like cannibal descendants of the workers who operated the subterranean machines which kept this elite provided with all its needs. This vision of the future counters the Victorian myth of progress, and explores the interdependence of workers and masters, perverted into the dependence of the Morlocks on the flesh of the Eloi who they formerly served. The Time Traveller realises that evolutionary development toward technical refinement and social order will lead to decadence (in the Eloi) and to savagery (in the Morlocks) at the same time. In Pal's film version, a global war fought with nuclear weapons has exhausted the resources of this future society, and the remnants of the race have divided into those who continued to dwell on the irradiated surface (who became the Eloi) and those who stayed in underground shelters (and became the Morlocks). Clearly, the Cold War nuclear fears of 1960 have informed the future vision of Pal's film, while anxieties around Darwinism and class conflict fuel the novel. The changes made to the narrative in the film version essentially involve the updating of the journey into the future so that the fears and fantasies of 1960 can be included.[2] Each version of *The Time Machine* explores future times which are by definition alien to the audience, but this alien-ness is necessarily consonant with familiar ideas.

My focus here is less on the alien-ness of the creatures in the future than on the alien-ness yet familiarity of the time travel experience and the futuristic settings of the

[1] Earlier and shorter versions of *The Time Machine* were 'The Chronic Argonauts', serialised in the *Science Schools Journal*, April to June 1888, and an uncredited and unfinished serial 'The Time Machine', March to June 1894 in the *National Observer*. In January to May 1895 the *New Review* published a serial 'The Time Machine' similar to the first book editions published in 1895 by Heinemann, London, and Henry Holt & Co, New York. The 1960 film *The Time Machine* was directed by George Pal, with a screenplay by David Duncan, produced by MGM/Galaxy, and stars Rod Taylor and Yvette Mimieux. Other versions of Wells's story on film and television include a faithful rendition on BBC television adapted and directed by Robert Barr (screened 25 January 1949, revised and repeated 21 February 1949), a Canadian film version directed by Terence McCarthy in 1973, and an American 1978 TV movie adaptation directed by Henning Schellerup.

[2] There is insufficient space here to discuss the many differences between the novel and the film. For example, the endings are very different: in the novel, the Time Traveller journeys to a time when the Earth is about to become lifeless, and, depressed, he returns to collect materials for gathering specimens from the future as evidence of his travels. In the film, he falls in love with Weena, an Eloi woman, and after returning briefly to his own time he sets off again to find her.

story. The Time Traveller becomes a spectator who watches time move like a speeded-up film, and stops several times to explore the future scene. Like the cinema spectator, the Time Traveller sits on a red plush seat and watches a marvellous spectacle, and the journey into the future depends on a machine, a technological apparatus rather than magic or dream. The subjective experience being outlined in the novel is a subjectivity to be developed in cinema and in modern consumer culture in general where technology transports the consumer to a virtual environment primarily experienced visually. Temporal mobility in *The Time Machine*, as in cinema, allows the subject to encounter what is alien, yet necessarily familiarises this as a consumable media experience. But time travel allows more than a cinematic visual spectacle. Since the hundreds of centuries traversed in the Time Traveller's fictional journey involve changes in buildings, people, and even the geography of the landscape, the journey through time is in effect a tourist trip to alien spaces which he can leave his seat to explore. The time machine itself, as portrayed in Pal's film, looks like a sled with brass rails and over-decorated Victorian ornaments. It has a large revolving dish mounted vertically behind the Inventor, and coloured lights and indicators on its control surface. The time machine is envisioned on an analogy with a machine for travelling in space rather than time, signalling the association between temporal movement and spatial movement.

Both the novel and the film are predicated on what Anne Friedberg has called a "*mobilized 'virtual' gaze*", a characteristic aspect of modernity developing through the nineteenth century into the twentieth, whereby movement in space and time is simulated by visual apparatuses of representation: "The *virtual gaze* is not a direct perception but a *received* perception mediated through representation. I introduce this compound term in order to describe a gaze that travels in an imaginary *flânerie* through an imaginary elsewhere and an imaginary elsewhen."[3] Wells's fictional Time Traveller experiences the future directly, but the reader of the story, and the viewer of the film, experience a mediated version of this, mediated through language in the novel, and through the visual and aural resources of cinema in the film. The reader or spectator, becomes a *flâneur* or stroller like the Time Traveller himself, led on an exploratory journey through alien worlds. Friedberg continues: "The cinema developed as an apparatus that combined the 'mobile' with the 'virtual'. Hence, cinematic spectatorship changed, in unprecedented ways, the concepts of the *present* and the *real*."[4] In both Wells's novel and Pal's film

[3] Anne Friedberg, *Window Shopping: Cinema and the Postmodern* (Berkeley: University of California Press, 1993), pp.2-3

[4] *Ibid.*

adaptation, travel in time is experienced predominantly as a visual experience. But one of the main attractions of the novel and the film is the ability to stop the headlong rush into the future, so that the Traveller can stop and stroll around in a realistically-presented space. Time travel, like cinema, renders the moment virtual in order to allow a real-seeming experience of an alien space-time. Time travellers and cinema spectators are displaced from the reality of their own present and their own real location in order to be transported to "an imaginary elsewhere and an imaginary elsewhen."

The opening of Pal's film makes it clear that it is the cinema spectator who will be moved in virtual space and time and who will become the virtual subject of the time travel experience. It begins with a collection of brightly-lit timepieces, appearing in chronological order of their invention, moving out of the black and dimensionless space of the screen towards the spectator. It is as if the spectator is travelling through space, plunging headlong into black emptiness with the cinema screen functioning as a window onto the journey. The final clock is London's Big Ben, tilted at an angle, as the hour is heard to strike. Lightning flashes and thunder crashes as the shot changes to a rapidly-rising sun over which the film's title is superimposed. Then leaves and snow blow across a blue sky, succeeding each other rapidly as the seasons rush past. The first scene establishes the interior of the inventor's house, and the camera pans over a large collection of watches, mantel clocks and grandfather clocks, continuing the time motif and associating the spectator's own plunge through time with the interests of the central character. Already we can see that there is a slippage between the spectating subject in the cinema and the central time-travelling character. Furthermore, travel in time is parallel to travel in space, as the rushing forward movement past a series of clocks makes rather literally evident.

George Pal was drawn to Wells's story in part because it provided opportunities for state-of-the-art visual effects. His film version of *The Time Machine* uses many techniques including accelerated motion, reverse motion, pixellation, model shots, and mattes to render the experience of time travel, and the future worlds the Traveller encounters, with as much verisimilitude as was possible in 1960. Pal was a specialist in these technologies of illusion. He began his career as a puppeteer making short advertising films in the late 1930s. In 1940 he went to Hollywood and moved on to adventure films where he specialised in trick effects, receiving an Academy Award in 1943 for his development of innovative methods and techniques. The films he worked on included *Destination Moon* (Irving Pichel 1950), *When Worlds Collide* (Rudolph Maté

1951), *The War of the Worlds* (Byron Haskin 1953), *Tom Thumb* (1958, which he also directed), and *The Time Machine*. All of these films won Oscars for their special effects. Pal's special skill, then, was to realise the incredible, to make the alien and strange comprehensible according to visual conventions we can accept. In this respect he was part of a long tradition in cinema, where, since the emergence of the medium, film had been used as a support for wondrous spectacles, where what was absent, novel, distant or unfamiliar became vividly present as part of an entertainment for the paying consumer.

Science fiction, historiography and archaeology, which all blossomed in the later decades of the nineteenth century, share an interest in time; representing a future moment, a documented moment in the past, or an arrested time which we can uncover and see. Time travel in literature in the work of Wells or Mark Twain, appears at the same period as stories about lost civilisations in Conan Doyle's *The Lost World*, and novels by Bulwer Lytton and Butler. It is in this period that Roman sites in Britain, the pyramids, and Mycenae were excavated, and Arthur Evans recreated parts of the Bronze Age city of Knossos in Crete so that tourists could walk around it. The common feature in these different aspects of culture is the refinement of techniques of representation which can make what is past, absent, or fantastic into something which can be recreated, simulated, and rendered virtually present for an individual subject. Similarly, the beginning of cinema is associated with nineteenth century science's quest for knowledge of the physical world, with that period's obsession with memory, death, and preservation, with fairground trick effects, magic and the supernatural, and with the possibilities of exploiting mechanical inventions for a mass consumer public. All of these aspects of the culture of modernity are signalled near the beginning of *The Time Machine*. The story is told mainly in flashback in both the novel and in Pal's film, as a dishevelled inventor appears late to meet his houseguests, and tells the story of his time travels. The first flashback returns us to the day when his guests were shown a model time machine vanishing, an experiment which all four of them believe may be a parlour trick, like the seances, magic lantern shows, and short novelty films of the period. Like the spectators of the first films, the Time Traveller's audience are thrown into doubt about the evidence of their own eyes. For them, the disappearance of the model time machine might be real, but more likely a trick, a simulation, a scientific demonstration, or an optical illusion. *The Time Machine*, then, exploits the distinction between the virtual and the real, a distinction fundamental to the culture of modernity and to cinema.

Wells's novel was written amid a long-standing fascination with visually-based representational devices in the late nineteenth century, exemplified by the dioramas, panoramas, and other proto-cinematic devices of the period. Dioramas and panoramas were buildings where groups of spectators were presented with large back-lit illuminated images painted on semi-transparent screens, and used highly realistic painted backdrops and carefully-arranged effects of perspective and depth of field to seem to place the spectator in a remote landscape, or at the occurrence of a famous past event. They offered the viewer a highly realistic visual environment, representing places to which the great majority of people could never go. These devices were enthralling because they transported the spectator to alien places and alien times by means of visual technologies and supporting special effects. What was there to be seen might be alien, a vision of another place and another time, but the whole spectacle depended on the spectator's familiarity with how to look, and on some familiarity with the cultural significance of what was represented. Effects of perspective, of the play of light and shade, were carefully calculated to be as real-seeming as possible, to allow the spectator to immerse himself or herself in the sense of 'being there' in the scene. Although the spectator would never have visited the great cathedral of Chartres, the eve of the Battle of Waterloo, or the Swiss Alps, these places and events had already to be culturally established as significant and recognisable, so that there was a peculiar thrill in seeing them in all their grandeur. Like any consumer technology or media experience, the new, the alien, the surprising, had to be balanced with the expected, the familiar, and the conventional.

In the novel and the film, time travel is a curious mixture of scientific experiment and fairground thrills. The experience of time travel gives the inventor in the novel "a feeling exactly like that one has upon a switchback – of a helpless headlong motion!"[5] The Doctor in Pal's film version, one of the inventor's guests, suggests that the time machine is of no use or commercial value. Instead he recommends that the inventor should do something to help Britain in the ongoing Boer War. The inventor is presented as a scientist who resists the military or commercial potential of his work, and his trip into the future seems to be an escape from war and commerce. As if escaping into the virtual world of the cinema, to a film in which he is both spectator and central character, the

[5] H.G. Wells. *The Time Machine*. in *The Definitive Time Machine: A Critical Edition of H.G. Wells's Scientific Romance with Introduction and Notes*, ed. by Harry M Geduld (Bloomington & Indianapolis, Indiana University Press 1987), p.42. Geduld uses the text of volume 1 of the Atlantic edition of Wells's works, H.G. Wells *The Time Machine, The Wonderful Visit and Other Stories* (New York: Charles Scribner & Sons. 1924).

Time Traveller quits the time and space of his quotidian present. As Walter Benjamin wrote:

> Our taverns and our metropolitan streets, our railroad stations and our factories appeared to have locked us up hopelessly. Then came the film and burst this prison-world asunder by the dynamite of the tenth of a second, so that now, in the midst of its far-flung ruins and debris, we calmly and adventurously go travelling.[6]

Like the newly-invented cinema, time travel frees the subject from the present and the real, to replace them with a virtual present and a virtual reality which is novel, exciting, and technological. Like cinema technology, time travel seems to offer opportunities for science as well as tourism and commercial entertainment, yet the appeal of both Wells's story and of Pal's film is based on the pleasures of fantasy and speculation which they offer, rather than the exploration of the geometric and physical principles which each version refers to in order to ground time travel in scientific fact.

While early pioneers used film to explore the science of animal movement and to record contemporary life, entertainment rapidly became the most commercially successful use for the new technology. In 1894 the first Edison Kinetoscope parlour opened in New York, offering films of less than a minute, viewed by individual spectators who peeked into the Kinetoscope cabinets to see vaudeville performers and famous personalities. The film historian Terry Ramsaye wrote to Wells in 1924 asking whether the idea for *The Time Machine* was born from Wells's experience of the Edison Kinetoscope.[7] Wells replied that he did not remember any connection between early motion pictures and the writing of the story, though the description of the Time Traveller's first jaunt into the future is highly suggestive of cinema. The Time Traveller is in his laboratory, and catches sight of his housekeeper just before he accelerates forward in time:

[6] Walter Benjamin, 'The Work of Art in the Age of Mechanical Reproduction', in *Illuminations*, trans. Harry Zorn (New York: Schocken Books, 1969), p.316.

[7] Terry Ramsaye, 'Robert Paul and *The Time Machine*', from T. Ramsaye, *A Million and One Nights* (New York: Simon & Schuster, 1926), reprinted in Geduld, p.196.

> Mrs. Watchett came in and walked, apparently without seeing me, towards the garden door. I suppose it took her a minute or so to traverse the place, but to me she seemed to shoot across the room like a rocket. I pressed the lever to its extreme position. The night came like the turning out of a lamp, and in another moment came to-morrow. The laboratory grew faint and hazy, then fainter and ever fainter. To-morrow night came black, then day again, night again, day again, faster and faster still.[8]

The experience is entirely visual, and places the Time Traveller in the role of filmmaker (controlling the machine) and spectator at the same time. As he speeds forward, the flickering motion of a film projector is suggested in the rapid alternation of day and night. The Kinetoscope allowed the novelty of seeing simple action speeded up or reversed, which was one of the most entertaining aspects of early films for their spectators. Films showed the acceleration of mechanical or natural processes (like the growth of plants), and this is mirrored when the Time Traveller sees "great and splendid architecture rising about me, more massive than any buildings of our own time, and yet, as it seemed, built of glimmer and mist. I saw a richer green flow up the hillside, and remain there without any wintry intermission."[9] When the Time Traveller returns to his original time, he sees accelerated reverse motion:

> I think I have told you that when I set out, before my velocity became very high, Mrs. Watchett had walked across the room, travelling, as it seemed to me, like a rocket. As I returned, I passed again across that minute when she traversed the laboratory. But now every motion appeared to be the exact inversion of her previous ones. The door at the lower end opened, and she glided quietly up the laboratory, back foremost, and disappeared behind the door by which she had previously entered.[10]

What both time travel and cinema can do is to make the familiar appear unfamiliar by changing the manner of its perception. What is rapid can be slowed down, what moves

[8] Wells, *The Time Machine*, p.41-2.

[9] *Ibid.*, p.43.

[10] *Ibid.*, p.87.

slowly can be speeded up, and forward motion can be reversed. Time travel and cinema seem to show the spectator the workings of the laws of nature, granting him or her a special perception, which makes the ordinary marvellous and strange.

In Pal's film, the first journey through time uses various cinematic trick effects, and the laboratory has a large glazed wall which enables it to function like a cinema screen, through which the inventor seated at the machine can see a panorama of the changing world outside. Special effects include fast motion shots of the sun and clouds moving across the sky, a snail speeding across the floor, shadow and light flitting across the inventor and the machine, and people moving rapidly in the street across from the laboratory. While the sequence is anchored through shot-reverse shots to George's point of view, many of the fast motion sequences are not from his spatial position, and function to make us share George's wonder and disorientation (noted in the voice-over narration) as he makes this short hop into the future. Time travel and cinema place the spectator in a privileged position, able to see movement in a way alien to normal experience. Because the Time Traveller is moving so rapidly through time, the people he sees cannot see him, and events unfold as if he were not present. One of the components of cinematic pleasure explored by Christian Metz and other film theorists is exactly this transcendent vision, where the cinema spectator seems to master and control what is seen on the screen, while being excluded from the action and removed from responsibility for it.[11] The Time Traveller at this point, and the cinema spectator, are both apparent masters of vision, and also voyeurs of a world which they cannot enter.

In 1895 the Lumière brothers showed the first publicly projected films in Paris, exhibited at the Empire Music Hall in London in 1896. Also in 1895, the year *The Time Machine* was published, Robert Paul, a scientific instrument maker from London who had copied and improved the Kinetoscope, designed a motion picture camera with his collaborator the photographer Birt Acres. By 1896 Robert Paul was showing his own films at Olympia in London and the Alhambra music hall, and had made the first British fiction film, *The Soldier's Courtship*. Ramsaye reports that Robert Paul read *The Time Machine* soon after its publication, and it gave him an idea for a new way to use the film medium.[12] Paul wrote to Wells, who visited him at his London studio. After the meeting with Wells, Paul entered patent application no.19984, dated 24 October 1895, for "A

[11] Christian Metz, *The Imaginary Signifier: Psychoanalysis and the Cinema* (Bloomington: Indiana University Press, 1982).

[12] See Ramsaye, in Geduld, p.196.

Novel Form of Exhibition or Entertainment, Means for Presenting the Same."[13] It begins: "My invention consists of a novel form of exhibition whereby the spectators have presented to their view scenes which are supposed to occur in the future or the past, while they are given the sensation of voyaging upon a machine through time."[14] Paul's invention was never built, due to lack of funds, and belonged among a rash of inventions at the turn of the century which were combinations of film with diorama-like attractions or fairground magic effects. In 1904, for instance, at the St Louis Exhibition, George C. Hale presented Hale's Tours, where travelogue films were shown to spectators seated in a railway carriage, with train sound effects and a wobbling floor to simulate movement. The similarities between the descriptions of time travel in Wells's novel and the experience of cinema seem to have triggered Paul's idea for a virtual time travel attraction exploiting aspects of several recently-invented technologies.

The mechanism was to be a "platform, or platforms" which could contain a group of spectators enclosed on three sides, facing a screen on which "views" were to be projected. The platform would be moved by cranks to produce "a gentle rocking motion."[15] While the platform was moving, fans would blow air over the spectators, simulating the effect of motion, or the fans could be visibly attached to the platform as if they were a means of propulsion.

> After the starting of the mechanism, and a suitable period having elapsed, representing, say, a certain number of centuries, during which the platforms may be in darkness, or in alternations of darkness and dim light, the mechanism may be slowed and a pause made at a given epoch, on which the scene upon the screen will gradually come into view of the spectators, increasing in size and distinctness from a small vista, until the figures, etc., may appear lifelike if desired.[16]

Time travel would be simulated, as in Wells's novel, by a motion not unlike a fairground ride, and would involve passages from darkness to light reminiscent of Wells's description. It was important that the scene should be "realistic," showing a "hypothetical

[13] The patent application is reprinted in full in Geduld, pp.198-9.

[14] *Ibid.*, p.198.

[15] *Ibid.*

[16] *Ibid.*

landscape, containing also the representations of the inanimate objects in the scene," and would use slides showing moving objects like a balloon which could "traverse the scene."[17] There would also be "Slides or films, representing in successive instantaneous photographs, after the manner of the kinetoscope, the living persons or creatures in their natural motions."[18] To produce dissolves and to enlarge or reduce the picture area, the projectors would be mounted on movable tracks, which could bring them closer to or further from the screen. Paul's invention reproduces Wells's fictional time travel experience quite closely; putting the spectator into a conveyance like a switchback car, so that travel in time felt not unlike travel in space, and presenting the journey through time as a movement through light and darkness where the spectator stops to see a future epoch in the form of a film. While the alien-ness of the experience is what is attractive, it resembles familiar experiences like a fairground ride and a film show.

In some ways, Paul's invention looks forward to the experience of watching Pal's 1960 film. Pal's film can offer a modern cinematic experience, where trick effects, synchronous sound and music, and the use of cuts and camera movement have been developed to encourage the spectator's identification with the action, a sense of verisimilitude, and dramatic pacing. Despite the futuristic settings of the film, and the alien-ness of the creatures in the future (especially the blue-skinned, shaggy-haired and sharp-toothed Morlocks), by 1960 cinema was calculated to produce an impression of reality. Paul's invention drew on the familiar technology of nineteenth-century amusement parks, like the movement of the car and the blowing of air over the spectators, to produce similar effects. Following the practice at dioramas and panoramas, Paul also planned to use built sets which the spectators could physically explore:

> In order to increase the realistic effect I may arrange that after a number of scenes from a hypothetical future have been presented to the spectators, they may be allowed to step from the platforms, and be conducted through grounds or buildings arranged to represent exactly one of the epochs through which the spectator is supposed to be travelling.[19]

[17] *Ibid.*

[18] *Ibid.*

[19] *Ibid.*, p199.

Here physical movement and temporal movement appear together, and the spectating subject literally becomes a *flâneur* or stroller, on a tourist trip, complete with guide, through a three-dimensional simulation of the future. In Wells's novel and in Pal's film, this experience has to be mediated through the spectator's identification with the Time Traveller himself, who narrates his journeys and describes his wonderment at what he sees, and whose point of view in the film is aligned with the camera as he enters buildings and explores new landscapes. In *The Time Machine* the Time Traveller is not only a voyeur but also a tourist having adventures in future locations, and Paul's invention clearly aimed to replicate this kind of experience.

In Pal's film the Inventor stops to look around in 1917, 1940, and 1966. These interludes give the film the chance to create street scenes reminiscent of one of Robert Paul's future environments. The immediate space around the Time Traveller is a dressed set in each case, using glass shots for background, and different cars, costumes and shop-fronts to establish location in time. In 1940 Pal departs from the Time Traveller's point of view and uses stock shots of blazing fighter planes, and a diorama model of London in the Blitz, but then from the Time Traveller's point of view the spectator witnesses postwar reconstruction. New concrete buildings rise and cranes and scaffolding grow up at high speed accompanied by jaunty music on the soundtrack. Accelerated motion is intended to be comic here, just as it was when the projector's ability to change the speed of natural movement was realised at the turn of the century. So far, the film has represented the known past in 1960, aiming for visual verisimilitude and focusing thematically on the immediate effects of war. In 1966, the projected future from the perspective of 1960 is like a sunny American suburb. The inventor's house (destroyed by a wartime bomb) has been replaced by a park. The local shop, which had become a department store by 1917, is now a glass and concrete shopping mall, and shiny American cars are in the street. The film's thematic emphasis on the effects of war continues as extras rush past and an air-raid siren sounds. As well as continuing the precise simulation of a realistic location, the film presents the future by extrapolation from a relatively pessimistic vision of humankind's folly. This virtual future environment is alien but familiar, all too obviously determined by a 1960 anxiety (but also shared by Wells in the 1895 novel) that the future will be the same as the present, only more so. The 1966 scene ends as an atomic blast devastates the street, volcanoes erupt, seemingly the Earth's vengeance against humankind's misuse of atomic power, and lava streams shunt burned-out cars across the set.

The Time Traveller speeds forward to a landscape seen first in a wide establishing shot featuring a futuristic domed hall and tower falling into decay. Like Robert Paul's walk-through simulations of the future, the settings are "realistic" in terms of visible detail, dimension, props and set dressing. In 802,701 the buildings and sets in Pal's film draw on an eclectic mix of forms familiar to the audience of 1960. The domed pavilions and towers are reminiscent of the structures built for Disneyland (which opened in 1955), Disney World, the 1951 Festival of Britain, and other realised versions of the future built for the tourist visitor of the period. Settings are to some extent matched with contemporary preconceptions of the relation between architectural form and function, so that the dome in which decayed books and museum exhibits are found has the wide steps and frontage of a European or American palace of culture. The dark caverns inhabited by the cannibal Morlocks contain the heavy-industrial machines of a dank nineteenth-century factory, while the Morlocks' gruesome deserted dining area, littered with the bones and skulls of their Eloi prey, seems like a reconstruction of an archaeological site. The costumes of the sylvan and vegetarian Eloi are toga-like, and they are most often seen in a wooded and verdant setting like an idealised recreation of the civilisation of ancient Greece. Pal's version of the future is not visualised as a consistent environment. It is neither solely utopian nor dystopian in terms of the signification of elements of *mise-en-scène*, but draws on the cultural currency of signs in the physical environment which were in circulation in the period when the film was made. This virtual future is necessarily unlike the present the spectator knows, but far from alien because of the use of a bricolage of elements with familiar connotations and resonances.

Cinema in general, as the film theorist Jean-Louis Baudry argued, proceeds from a "wish to construct a simulation machine capable of offering the subject perceptions which are really representations mistaken for perceptions."[20] As theories of spectatorship have shown, the principle of cinema and other audio-visual technologies is to offer what is recognisable and familiar, balanced against the pleasures of the new, the alien, of what cannot be seen or experienced in quotidian reality. The spectator is moved through represented space and time, offered an imaginary spatial and temporary mobility. The case of *The Time Machine*, novel and film, provides a strikingly literal illustration of the principles of pleasure in representation which cinema became focused on from a very early period in its development. A brief consideration of Paul's time travel spectacle links

[20] Jean-Louis Baudry, 'The Apparatus: Metapsychological Approaches to the Impression of Reality in Cinema', in *Narrative, Apparatus, Ideology*, ed. by P. Rosen (New York: Columbia University Press, 1986), p.315.

Wells's novel with cinema historically, showing that the novel was read, at least by someone who knew of the technical possibilities of the new medium, as a proto-cinematic experience. At the same time, as a science fiction story, *The Time Machine* reminds us that science fiction is especially significant in an examination of the subjectivity of modernity. Works in this genre often focus on spatial and temporal mobility and on the realisation of imaginary alien scenarios. The principle of science fiction is the simulation of an other world which is both alien yet representable through the conventions, competencies and technologies we already know. In 1902 in France, only a few years after Wells's novel was published and Paul had entered his patent for a time travel entertainment, the first science fiction film, *A Trip to the Moon*, was first shown. It portrayed a journey through space by means of a gigantic projectile to an alien world where strange creatures are encountered, and used theatrical sets, backdrops, and trick effects drawing on the capabilities of the film camera. The film's director, Georges Méliès, had formerly made his career as a stage magician. Just a few years after Paul's idea for a time travel attraction, movement in time and space were simulated on the cinema screen, rather than by elaborate combinations of film, static images, built sets, viewing platforms, and tour guides. The modern notions of travel in space and time, which Wells's novel narrated in such visual form, began to become the stock in trade of film as commercial entertainment for the individual consumer, enjoying a mobile gaze but sitting still in the auditorium. The subject in modernity, strolling either literally or by means of a mobile gaze, through a virtual reality associated with commodity consumption and mass entertainment, is both necessary to and furthered by the pleasures of cinema, time travel, science fiction, and tourism.

Jan Hollm

The Time Machine and the Ecotopian Tradition

In the following I should like to investigate the relationship between H.G. Wells's *The Time Machine* and utopian romances and utopian novels that envision an ecologically sound society and could thus be called ecotopian. I hope to demonstrate that *The Time Machine* is inter-linked with this literary genre because Wells addresses problems that lie at the very centre of the ecotopian discourse.