

ORIENTATION IN FILM SPACE

A Cognitive Semiotic Approach

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1. Participatory and non-participatory make-believe

In the introduction to his book *Image and mind*, Gregory Currie asks: “What role does imagination play in our response to fictions ?”² Following Kendall Walton, he argues that spectators adopt an attitude of make-believe or imagining in relation to fictions (to fictional actions, characters, and events). Both Currie and Walton therefore argue that fictions appeal, not to belief, but to imagination. One consequence is that film spectators are not subjected to an illusion, or false belief, when watching a fiction film. Instead, they generate simulated beliefs, or beliefs that “run off-line”, in Currie’s phrase. Currie gives an example :

Compare believing that you are confronted by a dangerous bear with imagining that you are. Imagining there is a bear in

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² G. CURRIE, *Image and mind: film , philosophy, and cognitive science*, New York, Cambridge University Press, 1995, p. xii.

front of me, just like believing there is one, may cause a decision to flee. But in the imaginary case the decision itself is an imaginary one¹.

Similarly when watching fiction films : when confronted with an image of a bear, spectators imagine being confronted by a bear. But we do not flee because the confrontation is simulated, and our decision to flee is imaginary. Our mental processes therefore run off-line, and are disconnected from normal behavioural outputs. Currie calls this the "Simulation Hypothesis". Walton develops a similar theory in his book *Mimesis as make-believe*². He considers a film spectator, named Charles, watching a horror film containing a threatening green slime. Walton attempts to characterize Charles' experience of feeling threatened. Walton concludes that Charles does not actually fear the slime, for it is fictional (or imaginary, or make-believe) that he fears it. "It is fictional that he is afraid, and it is fictional that he says he is"³. Charles is therefore participating in a game of make-believe with the film. But crucially, in opposition to Walton, Currie argues that the make-believe only refers to the content of a fiction, not the spectator's perceptual relation to the fictional content.

Spectators do, of course, have real perceptual relations to real events when watching a film –we actually see a photographic representation of film actors, props, and sets. This is what Noël Carroll calls "physical portrayal"⁴. But beyond this, Currie denies that film spectators have imagined perceptual relations to fictional events. "The question", he points out, "is whether the make-believe is *participatory* in the minimal sense that it requires us to imagine that we stand in direct perceptual relations to the characters and events depicted"⁵. Do we "imagine that we stand in direct perceptual relations to the [fictional] characters and events depicted" ? And if so, how are spectators oriented in relation to these fictional events ? This is the crucial question I address in this paper.

¹ *Ibid.*, p. 150.

² K. WALTON, *Mimesis as make-believe: on the foundations of the representational arts*, Cambridge, Mass., Harvard University Press, 1990.

³ *Ibid.*, p. 242.

⁴ N. CARROLL, *Philosophical problems of classical film theory*, Princeton, Princeton University Press, 1988, pp. 149-52.

⁵ G. CURRIE, "Visual fictions", *The Philosophical Quarterly*, n° 163, April 1991, p. 135.

The question involves determining if two levels of make-believe/imagining exist in watching a fiction film, or only one level: firstly, do spectators take an attitude of make-believe to the events of the fiction? And secondly, do spectators take an attitude of make-believe in the perceptual relations they establish to those events? I shall argue that both levels of make-believe are necessary for a fiction to be perceived as fictional, *for it is the spectator's participation that makes a fiction fictional*. This is because fiction is epistemological, not ontological; it is not an inherent property of a film, but the result of the film spectator's disposition, or mode of attention, towards a film¹. For Currie, only one level of make-believe exists – spectators only take an attitude of make-believe to the events of the fiction, not to their perceptual relation to the fiction. In effect, Currie is arguing that spectators stand outside fictions, that make-believe is non-participatory, that spectators are not oriented in fictional spaces. He is therefore rejecting the Participatory Thesis, or the Imagined Observer Hypothesis (IOH): the idea that spectators participate in fictions, that they occupy the position of an imagined observer in the fiction: “What I shall object to is the idea that cinematic works encourage us to imagine ourselves to be observers of the fictional events, placed within the world of the fiction”². In Currie's own terminology, he is rejecting imagining seeing or personal imagining (what Christopher Peacocke calls “imagining from the inside” of a fiction) in favour of impersonal imagining (or imagining from the outside of a fiction).

Currie's reasoning is straightforward and literal minded. He points out that the two main premises of personal imagining, or imagining seeing, are that, firstly, spectators imagine seeing the fictional events of the film; and secondly, they imagine seeing them from the camera's position, or the film's intrinsic perspective. He rejects the first premise because fictional objects, characters, and events do not exist. Therefore, he asks, “How can we have a visual-perceptual relation to something that does not exist?”³ He rejects the

¹ Spectators cannot, of course, freely choose to perceive a film as fictional or non-fictional. This process is constrained by institutions. In a documentary film, spectators are encouraged to remain on the level of physical portrayal and to downplay imagined perceptual relations to the images, because the events portrayed are real, not fictional. See R. ODIN, “A semio-pragmatic approach to the documentary film,” in W. BUCKLAND (ed.), *The film spectator: from sign to mind*, Amsterdam, Amsterdam University Press, 1995, pp. 227-35.

² G. CURRIE, *Image and mind*, *op. cit.*, p. 166.

³ *Ibid.*, p. 184.

second premise, that spectators occupy the film's intrinsic perspective as constructed by the camera, because it leads to some absurd consequences. Every time a film cuts to another shot, its intrinsic perspective changes, for the camera's position changes. And according to the IOH, film spectators can imagine themselves successively occupying each new camera position. For Currie, such a premise "seems to misdescribe the experience of movie watching". He adds that "Do I really identify my visual system, in imagination, with the camera, and imagine myself to be placed where the camera is? Do I imagine myself on the battleground, mysteriously immune to the violence around me, lying next to the lovers, somehow invisible to them, viewing Earth from deep space one minute, watching the dinner guests from the ceiling the next?"¹

Like Kendall Walton, Murray Smith, Jerrold Levinson, among others, I am sceptical of Currie's rejection of the second premise of the IOH, for spectators are *necessarily* oriented in a film's fictional space by perceptual relations, they are imaginatively placed in direct relation to fictional objects. After all, if we are not projected into a fictional world, we cannot perceive it as a fiction, for we remain on the level of physical portrayal, or ocular deixis. Currie seems to reject the IOH on the basis of a number of awkward consequences or entailments—that it entails spectators are placed on the battlefield, etc. But defenders of the IOH argue that *imagining seeing* is precisely that: *a form of seeing that does not entail the spectator's physical embodiment in the fiction*. This implies that our relation to fiction is asymmetrical in terms of access: we see fictional characters, but because we are not physically embodied in the fiction, they cannot see us. The crucial issue is the status of our seeing and our embodiment in the fiction.

By identifying the awkward consequences of the IOH as pseudo problems, we find no reason to reject imagining seeing. We can even use Currie's Simulation Hypothesis to restate the IOH: When watching a film, I imagine I am seeing a bear from close proximity, but I do not believe I am actually positioned near the bear. I simply simulate the belief that I am seeing the bear from close proximity. And the simulation of a visual reception point (I imagine being *close to* the bear in this example) increases my simulated fear.

¹ *Ibid.*, p. 171.

Recent film philosophers have argued that looking at motion pictures involves more than the simple act of actual seeing, but we still need to determine the degree of imaginative seeing that exists. We need, therefore, to articulate more clearly the relation between seeing, mental representations, imagination, and systems of signs that orient the individual in physical and fictional spaces. To do this I need to investigate the work of Currie and Walton in terms of the work of Karl Bühler and George Lakoff¹. In the 1930s Bühler examined the behaviour of individuals, especially the way they orient themselves in real and fictional spaces. Lakoff has developed a theory of embodied cognition (image schemata directly motivated by the body) to explain how individuals interact with and create meaning from their environment.

In Chapter 2 of *The Cognitive Semiotics of Film* I argue (by means of Lakoff's work) that *perception* is embodied, by grounding it in the physicality of the body². In this paper I go one step further and attempt to ground the individual's *spatial orientation* (in real and fictional spaces) in the physicality of the body. I agree with George Legrady who comments that :

To experience space is to engage with it through one's presence, to possess it by being immersed in it, in the same way one possesses space when inside a room, in a park, or on the streets. Computer generated virtual, immersive environments create the illusion of space by simulating visual clues such as boundary delineations which allows us to perceive directionally and to circulate³.

Individuals engage with and immerse themselves in –although in different ways– physical, fictional, and virtual spaces. In the following pages I examine the way individuals engage with and immerse themselves in film space through their bodily presence, and end with a few comments on bodily engagement with virtual space.

¹ K. BÜHLER, *Theory of language*, translated by Donald Fraser Goodwin, Amsterdam, John Benjamins, 1990. G. LAKOFF, *Women, fire, and dangerous things : what categories reveal about the mind*, Chicago, University of Chicago Press, 1987.

² W. BUCKLAND, *The cognitive semiotics of film*, New York, Cambridge University Press, 2000, Chapter 2.

³ G. LEGRADY, "Intersecting the virtual and the real : space in interactive media installations," *Wide Angle*, vol. 21, n° 1, January 1999, p. 105.

For a visual representation of all the terms and concepts I use, see Figure 1.

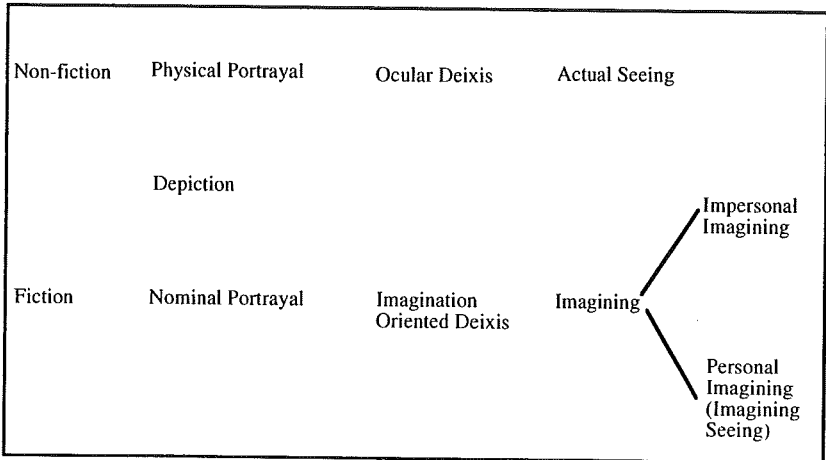


Figure 1

2. Imagination-oriented deixis

In watching a fiction film, the spectator's vision and body image are transported from his or her immediate physical, local space to a remote space (the space of the film's fiction). What fundamental spatial properties of the physical, local space are carried over and/or simulated in the remote space? The fundamental spatial properties include:

- Topology
- Orientation
- Distance
- Containment, and
- Movement

All these spatial properties are important for studying the fundamental spatial properties of film images, but here I shall delimit my research to orientation.

Two fundamental questions we need to ask about orientation are: what space? And: what type of orientation? The two types of

spaces to which I will refer are real space and its cognitive representation – imaginative space. (Both are in opposition to abstract spaces such as those constructed in pure mathematics, for example).

What type of orientation ? There are three basic types : absolute, intrinsic, and contextual. Absolute orientation refers to cardinal directions (North, South, East, West), which collectively represent an objective frame of reference within global space, therefore enabling absolute orientation. Intrinsic orientation originates from the properties of objects (e.g., their symmetry) and the frame of reference for intrinsic orientation in a three dimensional space consists of three axes : up/down, front/back, and left/right. Finally, in contextual orientation, the frame of reference consists of two relative points, for example a speaker and objects or events to which he or she refers. This type of orientation is called deictic, and is not limited to (has never been limited to) verbal language.

My discussion of orientation will focus on contextual orientation in both real and imagined spaces or, more particularly, contextual orientation in the real and imagined spaces of fiction films (for fiction films combine at the same time real and imagined spaces).

A few words on the two main contextual reference points :

Objects in both real space and imagined space (or, more specifically, signs in an environmental space).

I-here-now (the speaker's or spectator's zero point) ; both verbal language and narrative films are egocentric, that is, centred around the speaker or spectator's ego [or their body, since the ego is simply the cognitive representation of the body in the mind] ; although the ego is only a contextual reference point, for each individual their ego is experienced as an absolute reference point ; this reference point is also a necessary characteristic of imagining – that is, imagining is necessarily egocentric, or personal, in opposition to Currie's suggestion that it is impersonal.

In the 1930s Karl Bühler developed a situational model of action, which involves studying the way individuals are embedded in an environment and how they meaningfully (rather than randomly) interact with it. For Bühler, the fundamental type of interaction is orientation. Individuals are not, therefore, passively placed in space, but are actively engaged with, immersed in, and interact with it. One's

very presence in a space creates a form of contextual orientation, although the orientation process is not complete until the individual establishes a coordinated relationship with his environment and mentally represents it. Moreover, it is through vision by which humans primarily orient themselves in real space and create mental representation of that space (although other senses, such as hearing and touching, play a lesser role). This is why Bühler calls orientation in real, physical spaces “ocular deixis”.

The spectator’s deictic reference point in real space is shifted to an imaginative reference point when watching a fiction film. Bühler argues that deictic terms can be used when the individual is coordinated to an imagined visual space. In opposition to ocular deixis (the orientation of the individual in a real, physical space), Bühler calls orientation in imagination “imagination-oriented deixis”. Moreover, he identifies three types, and uses the parable of Mohammed and the mountain¹ :

- a. imagination-oriented deixis in which objects come to the individual (Mohammed imagines the mountain coming to him) ;
- b. imagination-oriented deixis in which the individual undertakes an imaginary journey (Mohammed imagines going to the mountain) ;
- c. imagination-oriented deixis which combines orientation in imagination with ocular deixis (Mohammed sees an imaginary mountain from the position of his actual perception).

In outlining the second category in more detail, Buhler writes : “When Mohammed feels displaced to the mountain, his present tactile body image is connected with an imagined optical scene. For this reason he is able to use the local deictic words *here* and *there* ... and the directional words *forwards*, *back* ; *right*, *left* on the phantasy product or imagined object just as well as in the primary situation of actual perception”². The two crucial points here are that a “tactile body image is connected with an imagined optical scene” and that, within the imagined optical scene, the individual can orient him or herself. Bühler reinforces this point when he elaborates on the third type of imagination-oriented deixis (which can be developed to explain perception in the cinema) : every individual displaced in imagination “takes his present tactile body image with him, to put it

¹ K. BÜHLER, Chapter 8, *Theory of language*, *op. cit.*

² *Ibid.*, p. 153.

metaphorically. He takes it along in the second type (displacement) ; he retains his present tactile body image together with his optical orientation within actual perception from the very beginning in the first type and integrates what he imagines into it”¹. He concludes : “To what extent it is possible to superimpose or otherwise to combine remains an open question from a purely psychological point of view”². Since Bühler wrote this I think it has become less of an open question, particularly after reading the work of cognitive semanticists such as George Lakoff and Mark Johnson, who oppose “objectivism” and emphasize the human nature of the mind and cognition – or, more specifically, argue that all cognition is embodied. Lakoff : “where objectivism defines meaning independently of the nature and experience of thinking beings, experiential realism [or cognitive semantics] characterizes meaning in terms of *embodiment*, that is, in terms of our collective biological capacities and our physical and social experiences as beings functioning in our environment”³. Lakoff is using a broad definition of the term “experience,” one that includes everything which plays a role in constructing human understanding, from the genetic make-up of our bodies to the way the body interacts with its social environment. Lakoff stresses that this is not simply a return to classical empiricism, where experience is understood as passively received sense impressions, since “experience does not *determine* conceptual systems, but only *motivates* them”⁴.

To specify what they mean by embodiment, Lakoff and Johnson make the distinction between conceptual structure and preconceptual bodily experiences, and employ the notion of embodiment to argue that conceptual structure arises from (or is motivated by) preconceptual bodily experiences. The distinction is not therefore based on the opposition between structured concepts/unstructured

¹ *Ibid.*, p. 154.

² *Ibid.*

³ G. LAKOFF, *Women, fire, and dangerous things*, *op. cit.*, pp. 266-267. See also M. JOHNSON, *The body in the mind : the bodily basis of meaning, imagination, and reason*, Chicago, University of Chicago Press, 1987. Lakoff’s and Johnson’s theory of embodied meaning resembles Thomas A. Sebeok’s theory of the biosemiotic self. For Sebeok, each species constructs, according to its own unique sensory and bodily structure and functions, its own *Umwelt* (its own perception of the outer world). Due to the variation in the biological make up of each species, it is plausible to argue that different species live in different sensory worlds. See TH. A. SEBEOK, *An introduction to semiotics*, London, Pinter Publishers, 1994, esp. pp. 5, 11-12, 113, 122-23.

⁴ G. LAKOFF, *Women, fire, and dangerous things*, *op. cit.*, p. 310.

experiences, for both authors argue that experience is itself structured and is already meaningful.

Lakoff characterizes experience in terms of kinesthetic image schemata, which are simple structures that arise from the body –such as up-down, back-front, centre-periphery, part-whole, inside-outside, paths, links, forces, and so on. These schemata are directly constrained by the dimensions of the human body. And because the dimensions of the fully-grown body are shared (uniform and constant), any discussion of conceptual structure in terms of the body does not fall into radical relativism and subjectivism. Image schemata are not, therefore, arbitrary, but are directly motivated by a shared and constant bodily experience.

The structure of our shared bodily experience then becomes the basis for rational, abstract thought by means of image based schemata and creative strategies such as metaphor and metonymy, which project and extend this structure from the physical domain into the abstract domain of concepts. As Johnson observes: “Through metaphor, we can make use of patterns that obtain in our physical experience to organize our more abstract understanding”¹.

It will be useful to compare the above remarks by Bühler and Lakoff with Gregory Currie’s position. For Currie, it is not part of the film spectator’s imagination that he or she sees anything from the film’s intrinsic perspective. He denies that film spectators are guided and oriented in fictional space, for they are firmly grounded in “ocular deixis”, or the material, physical dimensions of the film image. To repeat an earlier point: if we do not project ourselves into the fiction, then (*pace* Currie) we cannot perceive it as a fiction.

Furthermore, Currie argues that spectators cannot be oriented in relation to fictional objects, characters, and events of a film, for such objects, being fictional, do not exist. Bühler acknowledges this issue when he notes that “The central question from a psychological point of view ... is how it is possible to guide and be guided when oriented on something absent”². Bühler’s response is the third type of imagination-oriented deixis, in which our imagining seeing is combined with or filtered through actual seeing. A fictional image invokes a spectator’s perceptual orientation to that image, both real and imagined.

¹ M. JOHNSON, *The body in the mind, op. cit.*, p. xv.

² K. BÜHLER, *Theory of language, op. cit.*, p. 142.

Noël Carroll offers a similar answer. His distinction (by way of Monroe Beardsley) is useful here : the distinction between “physical portrayal”, “depiction”, and “nominal portrayal”¹. “Physical portrayal” refers to film’s recording or documentation of the reality in front of the camera, and is found in André Bazin’s definition of film realism in terms of film’s indexical imprint of reality², as well as in definitions of the documentary. A physical portrayal represents a particular person, place or event. Therefore, a particular shot from *Citizen Kane* represents Orson Welles. “Depictions” and “nominal portrayals” separate the photographic image from the reality that caused it. When we think of a photographic image as a depiction, we focus on it as a member of a class (the photograph of Orson Welles also depicts the general term “man”). A nominal portrayal “represents a *particular* object, person, place, or event different from the one that gave rise to the image”³. In this sense, in *Citizen Kane* Orson Welles nominally portrays Charles Foster Kane. More generally, Carroll writes : “nominal portrayal is the basis of all fiction film”⁴. This is because the spectator needs to go beyond the particular physical portrayal and perceive or infer a particular fictional character. In fiction films, the photographic image is simply a means to an end. Spectators look through the physical portrayal to the nominal portrayal by way of imagining seeing. This explains how film spectators can look at fictions – the physical portrayal is a prop in a game of make-believe, in Walton’s terms. Just as a child sees a tree stump and imagines seeing a bear (to use Walton’s example), film spectators see Orson Welles in *Citizen Kane* and imagine seeing Charles Foster Kane. The level of fiction and imagining seeing are therefore interrelated, for fictional entities only come into being through the act of imagining seeing – moreover, through the act of personal imagining seeing. By means of Bühler and Lakoff, we have refuted Currie’s theory of impersonal imagining, and replaced it with a theory of personal imagining or imagination-oriented deixis, in which spectators are contextually oriented in the fictional space of a film by means of a mental representation of their own body image.

¹ N. CARROLL, *Philosophical problems of classical film theory*, op. cit., pp. 149-52.

² A. BAZIN, “The ontology of the photographic image,” trans. Hugh Gray, *What is cinema?*, vol. 1, Berkeley, University of California Press, 1967, pp. 9-16.

³ N. CARROLL, *Philosophical problems of classical film theory*, op. cit., p. 151.

⁴ *Ibid.*

3. Fictional and virtual spaces

I have begun to explore the relation between literal and fictional space in fiction films, as well as the spectator's literal and imaginative orientation in relation to fictional entities (particularly the spectator's location in relation to the fictional geography). Are there any additional applications of these ideas, apart from refuting Currie's theory of impersonal imagining, and replacing it with a theory of personal imagining? So far I have identified four:

1. Explain how films move from the non-fictional level (ocular deixis) to the fictional level (imagination-oriented deixis), especially in opening sequences;
2. Develop the concept of focalization in relation to fiction films;
3. Identify levels of fiction;
4. Analyze the individual's interface with virtual reality.

3.1. From non-fiction to fiction

The transition from the non-fictional to the fictional level is something spectators normally take for granted when watching fiction films. Each film, however, does not simply transport or displace our vision and body image to a fictional space. We need to consider the process by which this displacement takes place.

I have chosen the opening of *North by Northwest* (Alfred Hitchcock, 1959) as an example. The sequence begins with non-fictional elements: orchestral music, the MGM logo, and actors' names – which slide effortlessly on frame, across an abstract grid drawn at an angle to the screen's surface, and off frame. As the film's title moves upwards, the grid dissolves into a fictional space, the side of an office block, which replicates the angle and design of the non-fictional space it replaces. This is simply the first stage in the transition from the non-fictional to the fictional level. The credits continue to effortlessly slide on and off frame; they seem to slide along the side of the office block – that is, they simulate an interaction with the fictional space. This sliding movement draws attention to the boundary between the non-fictional and fictional levels.

Eventually a change of shot takes place ; in fact, a series of seven shots follow, of the rush hour. Three titles are superimposed over these seven images (including a disclaimer that the events, characters, and firms are fictitious). The titles continue to slide on and off frame ; their separateness from the fictional events is emphasized because they remain on screen through the shot transitions (emphasizing that they are imposed over the images). The interaction between Hitchcock and his own director credit is of interest. He literally follows his name – he almost “chases” his name off frame (simulating an interaction between non-fiction and fiction). Like all the titles, Hitchcock’s credit slides effortlessly over the image, while Hitchcock is shown immobilized in the image, as he is prevented from getting onto a bus. Hitchcock is therefore represented on both the fictional and non-fictional levels and, within the fictional level, he is nominally portrayed (he is an extra in the crowd) ; however, for the cinephile, he is physically portrayed (he is the film’s director).

The first post-credit shot reveals the fictional space of the following scene – an establishing shot in which the spectator has now crossed the threshold from non-fiction to fiction, from ocular deixis to imagination-oriented deixis. However, crossing the threshold does not involve rejecting the first level for the second, but involves combining the two, as Bühler suggested in his discussion of the third type of imagination-oriented deixis. This third type closely resembles seeing in the cinema – except, of course, in the cinema there is more emphasis on ocular deixis (actual seeing) than in Bühler’s example.

3.2. Focalization and levels of fiction

Edward Branigan has developed a sophisticated theory of narrative agents and levels of narration in the cinema¹. The focalizer is a fundamental narrative agent who acts as a mediator between the fictional events and the spectator. With the assistance of the focalizer, the spectator becomes contextually and intrinsically oriented in fictional space. In addition, Branigan identifies eight levels of filmic narration, each one created by an narrative agent, and each one

¹ See E. BRANIGAN, *Narrative comprehension and film*, New York, Routledge, 1992 and W. BUCKLAND, “Narration and focalisation in *Wings of Desire*,” *CineAction*, n° 56, September 2001, pp. 26-33.

describing a realm of the film's "reality". At the topmost level is the film as a material text, created by an historical author. Other levels include the story world, plus the focalized levels representing the external perceptions and internal thoughts of characters in that story world.

The levels of fiction I am proposing exist on the boundary between external and internal focalization. *Total Recall* (Paul Verhoeven, 1990) presents three alternative "levels of reality" for the main protagonist Doug Quaid to inhabit – or, perhaps we can say, different possible worlds, for each alternative world only has a potential existence (unless you are a modal realist). At key points in the film, both Doug Quaid and the spectator are confused about which level of reality is operative. Is Quaid simply a lowly construction worker on Earth? Or is he strapped into a chair at ReKall being fed memories of a trip to Mars, pretending to live the life of a secret agent? Or is he really a secret agent on Mars, working in collusion with Coahaagen to kill the leader of the Mars resistance? The spectator is placed with or focalized around Quaid's experience of these different levels of fiction. Like Quaid, we are disoriented for we do not know which level of fiction is "true," and which ones are false. A cognitive reading of *Total Recall* may not (indeed, should not) resolve the film's inherently ambiguous levels of fiction, but should aim to bring them into sharper focus.

ExistenZ (David Cronenberg, 1999) also presents three levels of reality, and creates ambiguity concerning what level the characters are living in. But by the end of the film, it is evident that the film began on level two (in a computer game), progressed to level three (a computer game within a computer game), and then ended on level one (the characters' real life) – although a throwaway ending "challenges" this reading. The confusion of levels is simply caused by the fact that each level imitates the others, and the film begins on level two, not level one.

A fuller analysis would involve combining levels of fiction/possible worlds analysis with focalization, for the different possible worlds have a psychological origin. Indeed, the first three practical applications of a theory of fictional orientation are interrelated and should, ideally, be combined.

3.3. Interface with virtual reality

The fourth application, to virtual reality, seems to conform more strongly to Bühler's third type of imagination-oriented deixis, for a virtual reality environment also combines ocular deixis with an imagined, fictional space. However, virtual reality environments reverse the priority found in the cinema, for they emphasize imagination and downplay ocular deixis. But this is not to suggest we have an "out of body" experience when engaging with virtual reality. What we need to consider in more detail is the specific experience of engaging a virtual environment, and the body's role in generating that experience.

Alison McMahan has investigated the terminology used to describe the specific experience of engaging virtual environments, especially in 3-D video games¹. She examines the concept of "immersion" as it is used in virtual reality research, and discovers that it has become a vague, all-inclusive concept, and is often confused with the related term "presence." Whereas "immersion" is modelled on the experience of being submerged under water, of being surrounded by a completely other reality (in Janet Murray's definition²), "presence" refers to "the artificial sense that a user has in a virtual environment that the environment is unmediated"³. Immersion is only one factor that leads to the sense of presence (others include the quality of social interaction available in the virtual reality environment and the user's ability to accomplish significant actions in that environment).

McMahan uses this definition of presence to analyze the experience generated from the recent shift to 3-D video game design and an increasing use of first person point of view, both of which increase the game player's sense of presence, by means of perspective and a plethora of visual signs to simulate a physical environment. McMahan also emphasises that an increased sense of presence can be gained from the projection of the player's body image into the game.

¹ A. MCMAHAN, "Immersion, engagement, and presence: a method for analyzing 3-D video games," in *Video Game Theory*, edited by Mark J. P. Wolf and Bernard Perron, Routledge, forthcoming.

² *Ibid.*, p. 2.

³ M. LOMBARD and T. DITTON, quoted in A. MCMAHAN, *op. cit.*, p. 9.

(The player's presence is further increased by means of his or her interaction with the 3-D environment, an option not open to film spectators). The projection of the player's body image into the game is sometimes literally figured, in the form of the player's hands (usually pointing a gun straight ahead) graphically represented on the edge of the bottom frame line, or more fully in the form of an avatar – "textual or graphic representations of users that include a character designed to fit into the fictional environment in question, complete with a set of personality traits, skills, and health status"¹.

The study of presence in 3-D video games parallels the study of deixis in film. Presence is the result of perceptual and psychological immersion in an environment². Perceptual immersion involves blocking off as much sensory perception of the outside world in order to focus attention exclusively on the artificial world (or, in Bühler's terms, an attempt to eradicate ocular deixis and replace it with imagination-oriented deixis). Psychological immersion involves the film spectator's/game player's mental absorption into the artificial environment, which necessarily includes the individual's bodily projection into that space (by means of perspective, a rich visual environment, and interaction in the case of video games).

The paraphernalia recently invented to facilitate an individual's interface with virtual reality, including goggles, headphones, and gloves, increase both perceptual and psychological immersion, and therefore increases the individual's presence in a virtual environment. Yet, *pace* Currie, this new experience still involves processes common to daydreaming and to consuming fiction – a combination of real and virtual spaces, together with a process of projecting and orienting oneself in the virtual space.

¹ *Ibid.*, p. 10.

² *Ibid.*, p. 14.