# Chez le Photographe c'est chez moi: Relationship of actor and filmed subject to camera in early film and virtual reality spaces

Alison McMahan

In the original formulation of the Cinema of Attractions theory, Tom Gunning and André Gaudreault conceived of the attractions phase as a mode of film practice discernible before the development of classical cinematic editing and narration. In *Alice Guy Blaché, Lost Visionary of the Cinema* I argued, building on work by Charles Musser<sup>1</sup>, that attractions represent only one possible approach to filmmaking in the earliest phase of cinema. Another approach, characterized by a sophisticated use of on- and off-screen space, was in full use at the same time – most notably in some of the earliest one-shot films produced at Gaumont and directed by Alice Guy.<sup>2</sup> In this paper I explore another approach quite common in early cinema, whose sophistication we can appreciate retrospectively in the context of today's digital interactive narratives, where we see it re-emerging. I am referring to early films that consciously combine diegetic immersion with non-diegetic engagement in their audience address, much as virtual reality environments and computer games with first person and over-the-shoulder perspectives in three-dimensional spaces do today. To give these films a short-hand name I will call them "homunculus films."

## The Homunculus

Various meanings of the word "homunculus" (Latin for "little man," sometimes spelled "homonculus") exist, and several of them are relevant here. Most sources attribute the earliest use of the term to the fifteenth-century physician (pioneer in toxicology, among other things) and alchemist Paracelsus. Paracelsus claimed that he had created a kind of golem (though only 12 inches tall) that performed physical work for its creator until it got fed up and ran away. These creatures originated from human bones, sperm, and skin fragments and hair from animals, which were fermented in dung for forty days. In the late 17<sup>th</sup> century "spermists" would argue that individual sperm contained tiny "little men" that, when placed inside a woman, would grow into a child. Derivatives of this argument included mandrake roots that germinated in the ground under gallows, and were stimulated to grow into homunculi from a hanged man's spurt of semen emitted during his death throes. Impregnating a prostitute with a hanged man's sperm produced a woman devoid of morals or conscience.

Today the word homunculus refers less often to a real little man and more often to illustrate the functioning of a system thought to be run by a "little man" inside. Such a system includes human beings, as some inner entity or agent is somehow assumed to be inside our brains, making things run. One example of this was Descartes' use of the homunculus to resolve his theory of dualism, that the soul and the body are two completely separate entities. He posited a "little man" behind the eye to process visual stimuli. Of course, this immediately raises the question of who is behind the "little man's" eyes – another little man? And so on, ad infinitum.

In philosophy, homunculus arguments are used as yardsticks for determining where a theory is failing. For example, in theories of vision:

Homunculus arguments are common in the theory of vision. Imagine a person watching a movie. They see the images as something separate from them, projected on the screen. How is this done? A simple theory might propose that the light from the screen forms an image on the retinas in the eyes and something in the brain looks at these as if they are the screen. The Homunculus Argument shows this is not a full explanation because all that has been done is to place an entire person, or homunculus, behind the eye who gazes at the retinas. A more sophisticated argument might propose that the images on the retinas are transferred to the visual cortex where it is scanned. Again this cannot be a full explanation because all that has been done is to place a little person in the brain behind the cortex. In the theory of vision the Homunculus Argument invalidates theories that do not explain 'projection', the experience that the viewing point is separate from the things that are seen.<sup>3</sup>

# A more modern use of the terms is "the sensory homunculus":

the term used to describe the distorted human figure drawn to reflect the relative sensory space our body parts represent on the cerebral cortex. The lips, hands, feet and sex organs are considerably more sensitive than other parts of the body, so the homunculus has grossly large lips, hands and genitals. Well known in the field of neurology, this is also commonly called 'the little man inside the brain.' <sup>4</sup>

## The Homunculus as Cameraman

We can see Descartes' theory of the homunculus reflected in early cinema. As if to answer the question "Who is behind the camera?" a series of early films "stepped back" and depicted within the film's story world, or diegesis, the camera and the person operating the camera. Although a cameraman [with camera] was depicted within the diegesis, he was often at right angles to the action as it was actually filmed, creating a triangulated relationship: at one apex was the subject being filmed; at the another, the cameraman character; and at the third (and non-diegetic) apex the camera which was actually filming at what would become the spectator's viewing position.

Though in the "wrong" position, the cameraman character (the camera in the diegesis) is often an emotional stand-in, or homunculus, for the spectator. That is, the homunculus occupies the narratee position that the film has carved out for the viewer.

Let us look at some examples of early films where the homunculus is depicted as a still photographer. One of the earliest is the Lumière film Photographe, quickly remade as CHEZ LE PHOTOGRAPHE, for Gaumont by Alice Guy. Photographe is a one-shot film, and shows two men outside, one about to take a still photograph of the other. We see their activity in profile.

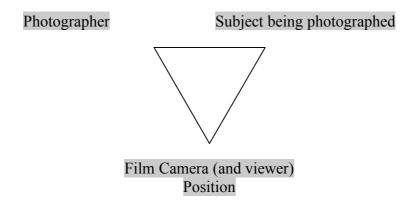


Figure 1. Setup for PHOTOGRAPHE

The photographer sits his subject in a chair, encourages him to comb his hair, positions his body at the correct angle for the camera (that is, slightly facing the movie camera), then walks behind the still camera and bends over to take the picture. (However he has no darkening cloth so it seems clear that the camera is only a prop.) His subject, not aware that the photographic exposure has already begun, takes a handkerchief out of his pocket and begins to blow his nose. This makes the photographer irate, and he jumps forward to take the handkerchief away. In the process he knocks over his tripod and the camera falls to the ground. He argues with the photographic subject, who has also jumped up. Both argue for a couple of beats, and then the man playing the photographic subject clearly checks in with the film director, "have we done this long enough yet?" They are encouraged to go on so they continue to argue while the man playing the photographer picks up his camera and gesticulates that it is broken. The man playing the photographic subject goes out of character again, pausing to look at the real camera, apparently taking direction.

The film is clearly making fun of the photographic subject's vanity, his lack of knowledge of how the photographic process works and his resistance to it. Then there is the humor in seeing the two men argue and nearly come to blows, the action that takes up more than half the film.

PHOTOGRAPHE is an early example of the multiple complexities of the homunculus film. The viewer's identification with the photographer is complicated when the other character addresses the film camera directly. This unwitting gesture calls attention to the fact that the action is being filmed by a second camera.

CHEZ LE PHOTOGRAPHE is clearly a remake of Louis Lumière's PHOTOGRAPHE.<sup>5</sup> Guy's version of the story is psychologically more complex. First, the setup is not an outdoor path, but a photographic studio; in addition to the still camera, we see a larger camera set in the background. The photographer is at work arranging things when a man arrives carrying a potted plant and asks to have his picture taken. After some discussion (haggling over price?), the photographer encourages the man to sit down in a chair facing the camera, takes his potted plant and sets it aside. The subject removes his hat and smoothes his hair, then replaces his hat. When all seems ready the photographer goes behind the camera and drapes himself with the darkening drape. The exposure has clearly begun. The subject seems unaware of this and is still trying to decide how best he wants to be photographed; he picks up the potted plant and holds it close to his face. The photographer comes out from under the drape and explains that he can't move during the exposure. The subject puts the potted plant down, but now he is aware that the source of control is in the camera lens and peers directly into it. This makes the cameraman lose his temper, who yells at him to sit down and maintain his pose. Inexplicably, given that the man came in for his photograph in the first place, he returns to his chair but turns his back on the camera and bends over, so that all the camera can see is a nice view of his backside. Now the cameraman is really angry and they argue; the camera is knocked over; and the cameraman hands the client his plant and makes it clear that he must leave.



Still from CHEZ LE PHOTOGRAPHE

As in the Lumière film, the cameraman is posited as a source of institutional control. Although the client seems willing to submit himself to this control, in fact he is resistant: he doesn't want to pose the way the photographer tells him, wants to be photographed with his cherished plant, and once he understands that the source of control is centered in the camera lens he interrogates it and then flouts its authority by turning around and bending over for the lens. This leads to his eviction from the institutional space, plant and all.

Alice Guy clearly understood the complexities of the original Lumière film and has expanded on its theme while modifying its practice in one important regard.

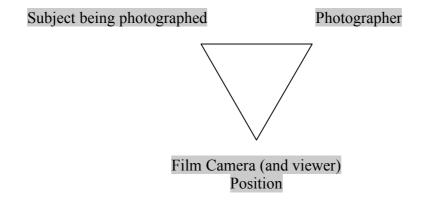


Figure 2. Setup for CHEZ LE PHOTOGRAPHE

As in the Lumière film, the photographer is the controlling force, the subject resists; and there is a homunculus feeding us the picture stream. The triangulation is almost identical to that of Photographe, except the photographer character is screen right whereas in the original he was screen left. The film camera (the homunculus) is located at a ninety-degree angle to the staged action. The film cameraman is represented in the film indirectly by the character of the still photographer in the film. In the Lumière film we were made aware of the homunculus position accidentally, because the actor playing the client consults with the film director about his performance. In Guy's film, though there is no direct address, we are reminded that the photographer character is only our emotional stand-in because he gets a full view of the subject's buttocks, while we, visually positioned at a ninety-degree angle, do not. Bending over is the subject's last act of resistance to being photographed. It is a diegetic act that invites the viewer to reflect on the power of the camera... when they are done laughing.

Compare Guy's satire of resistance to the Edison slapstick comedy, OLD MAID HAVING HER PICTURE TAKEN, (Edwin S. Porter & George S. Fleming, 1901). This one-minute film has two parts. First, an "old maid" (a man in drag), enters a photographer's studio to have her portrait taken. Discussion between maid and photographer. The photographer exits the frame. While she waits for him the old maid looks first at samples of the photographer's work, but something about her presence makes the poster fall to the floor. She then looks at the clock. The clock hands whirr around faster and faster and drop to the floor. Finally she preens in front of a full-length mirror, turning around to admire herself from all angles, and to her horror the mirror cracks. It is hard to escape the meaning of this: she is so ugly that even the objects in the room cannot stand the sight of her without breaking. Finally the photographer comes in, expresses chagrin at the cracked mirror and broken clock, then sits her down in the chair to pose her for the photograph. The two are now in profile to the film camera, the same setup as in Guy's film. The photographer pushes the woman's face so that the film

spectator gets a full view of her hooked nose, pronounced chin, and vacant expression. At that angle, it is impossible for the photographer to get a good portrait of her, which seems to be the point. He goes behind his camera to take the picture, and when he does the camera explodes. The old maid jumps in her chair, kicking up her skirt and revealing her bloomers.

By 1901 the hegemony of the still camera, as well as the film camera, was clearly established. The man behind the camera would decide who was worthy of being photographed, in what pose, and where. The subject, now a female who can only react to this process without taking control of it, can only hope to fit the photographer's requirements; the relationship between the two has moved from bawdy resistance to a sexualized dominator-dominated relationship. The humor in this film comes from the woman's blissful lack of awareness of her unsuitability as a camera subject due to her lack of sex appeal. This movie is of particular interest because the spectator is aligned with the photographer only for the second half of the film; for the first half the photographer is mostly absent, and the woman's preening and encounters with various reactive objects is staged directly for the film camera in an attractions mode.

## The Homunculus as Ocularizer

In other early films, instead of a photographer standing in for the viewer, there is simply a character, often a voyeuristic one. Gunning argues that, in the cinema of attractions paradigm, such sequences are governed by *ocularization* rather than *focalization*, that is, these films put something on display for a spectator rather than construct a character within a narrative. Gunning particularly focuses on films that "share a common pattern of alternation, cutting from a curious character who uses some sort of looking device (reading glass, microscope, keyhole, telescope, transom window, or...a deck of magically suggestive playing cards)".<sup>7</sup>

Richard Abel refers to these "ocularized" films as "looking" films, and points out that they usually show someone looking at a woman in a risqué position, but the view is staged to satisfy the voyeurism of the film spectator and not the character in the film. Here the off-screen space is indicated or marked within the framing of the film. Of course, not all films of this type are erotic and not all of them use "looking" devices". For example, in Pathé's THE ARTIST (1900) a client walks into an artist's atelier. He examines a painting in profile – the painting is turned so we can see it but we don't see it from his point of view – and leans over so far to look into it that he falls and damages the painting, which he now has to buy. Compare this to Emile Cohl's PEINTRE NEO-IMPRESSIONISTE in which an artist shows a client of series of images; for each image there is a close-up of the painting which ends up showing an animated sequence (red lobsters swimming in the red sea for the red canvas, and so on). Elena Dagrada explains the mechanism at work here: the close up of the painting, which enables the spectator to enjoy the animated sequence, is less a point of view shot for the character than it is a re-staging of the action for the film viewer's maximum enjoyment, and the figure of the art-purchaser in the film is a stand-in for the viewer:

In the future [that is, in narrative films that create a diegesis], however, the POV [point of view] shot would presuppose a diegetic conception of camera position. During a POV shot, in fact, the camera symbolically assumes the role of a fictional character, thus projecting a diegetic look onto the screen. But in early cinema, the diegetic conception of camera position did not exist, and in fact this position was presumed to be occupied by the spectator's look. For this reason, and

despite appearances, keyhole films do not represent at this stage a fictional character's viewpoint, as one would be led to believe today; rather, they represent the spectator's look.

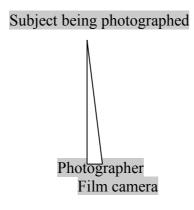
If we observe these films carefully, we realize that they restructure more or less explicitly the spectator's experience as an onlooker who, outside the cinema, at fairs, or at home, was accustomed to looking *through* something, whether through mutoscopes and kinetoscopes at peep shows...

Dagrada goes on to describe the spectator as "autonomous in relation to the syntagmatic continuity of the films in which they are set". 10

The same mechanism is at work in THE GAY SHOE CLERK (Porter, 1903). The action is staged in much the same way as in PHOTOGRAPHE, with the lady, the subject being viewed, screen right, the shoe clerk who enjoys the privileged view of her ankle screen left. The film camera is positioned at a ninety-degree angle to this action, but at the crucial moment cuts in, so that the spectator gets a nice close-up of the lady's ankle and calf as well; this close up is not from the clerk's point-of-view, but from the spectator's.

Though films like THE GAY SHOE CLERK have been discussed often, scholars have rarely given extended attention to the films I have labeled homunculus films. Gunning, however, does note them: "Point of view operates in these films independently of a diegetic character. In its outward trajectory the cinema of attractions addresses a viewpoint from which both the look of the camera and the look of the spectator originates...it is precisely this subordination [typical of classical film narrative] of the gaze to a diegetic character that the cinema of attraction avoids". In a footnote, Gunning takes issue with Noël Burch who sees The Big Swallow (James Williamson, 1901) as "basically in concert with later classical style. Burch, I believe, underestimates the importance of the narrativization of the identification."

THE BIG SWALLOW is harder to recognize as a homunculus film precisely because the spectator and camera are aligned and the camera shows the spectator's point of view – which is also a diegetic point of view for most of the film. The film begins with a man in medium-long shot walking towards the camera; from the description in Williamson's 1901 catalogue<sup>13</sup> we know that he is resisting being photographed. He comes closer and closer until all we can see is his mouth; his mouth opens and becomes a huge, dark cavern; and then we see first, a camera falling into the dark depth, followed by the photographer himself, who falls in head over heels. However, that is not the end of *us*, the real camera temporarily aligned with the cameraman character, because we continue to watch as the resistant subject backs up, mouth now closed, munching contentedly. In other words, the three apexes of the triangle are still there, but two of them are intermingled for the first part of the film and then separated:



## Figure 3. Setup for THE BIG SWALLOW

Immersiveness and engagement are therefore invoked by the same point-of-view shot. At first we see the photographic subject from the cameraman's point-of-view, but once he is swallowed we occupy an imaginary position. This makes it hard to separate the two at first: the homunculus camera position is easier to identify when the camera/spectator perspective and the diegetic perspective (of a spectator played by a character in the film) are separated; Christian Metz referred to this as "the empty placement for the spectator-subject". This setup is characteristic of numerous early erotic films.

## The Erotic Homunculus Film

When the object on view is a woman's objectified body, then the stand-in for the viewer incorporates a level of commentary on the film spectator, for the film spectator's benefit as well. For example, in [FIVE LADIES], Pathé 1900, a series of five short films of one shot each are joined together, each featuring a different lady. In the first, a rather teasing one, a woman is standing with her backside to the camera, while a painter, profile to camera, paints her image on a canvas we cannot see. However, a black woman, also in a state of undress, is seated on the floor and can see the woman's frontal nudity. The film spectator is left to enjoy the first model's lovely backside, the second model's frontal nudity, and her reactions, as well as the painter's, to the view of the first model, which are our only indicator for what we cannot see.



Still from [FIVE LADIES], first film in series, Pathé 1900

In the fourth film in the series a man, fully dressed, sits behind a curtain screen right, but positioned to face the camera. He observes a woman screen left, ostensibly positioned for the benefit of the hidden gentleman but in fact angled ideally for the camera, dressed only in a towel, who washes, powders, perfumes, and puts lotion on herself with no apparent awareness of her observer, who gets progressively more excited and makes asides to the camera.



Still from [FIVE LADIES], fourth film in series, Pathé 1900

In a variation of this positioning, [WIFE SURPRISED WITH LOVER] Pathé 1900, begins with the wife sitting on the sofa with her lover, both facing the camera. They hear the husband returning unexpectedly and the lover hides behind the sofa. The wife then greets her husband and sits on the sofa lavishing attention on him while the lover peers out and makes faces at the camera, to communicate his anxiety and discomfort.



Still from [Wife Surprised with Lover] Pathé 1900

The Edison Co. released a similar film in 1896, entitled INTERRUPTED LOVERS (William Heise and James White). In a mere 150ft a couple, consisting of an urban-style swell and a country girl, sit on a park bench. The man takes his cigarette out of his mouth and kisses the girl, while a young country man approaches the couple from the back. He runs to get the girl's father, who comes running in screen left and drags her away, while the young man deals with his suave rival. As in [WIFE SURPRISED WITH LOVER], the action of the lovers is staged for the camera, while the people who are reacting to them come up from behind, and their reactions are also played frontally. In both of these films the three apexes are in a straight line:

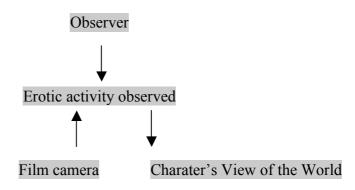


Figure 4. Setup for [WIFE SURPRISED WITH LOVER]

What each of these films has in common is that someone (usually a man) is looking at something (a painting, a naked woman), but what he is looking at is staged so that the film spectator, who is positioned usually at a ninety degree angle to the action (but in any case not in the viewing character's line of sight, or anything remotely like it), gets the maximum benefit out of the spectacle. The viewing character has exaggerated emotional reactions to the view, apparently the reactions the film attributes to its ideal spectator, although a level of non-diegetic comment on the viewing character's reactions is present as well (humor at the art buyer being duped, for example, or empathy with the hidden lover's chagrin).

## The Virtual Homunculus

This triangulated relationship is essentially the same as the player's or immersant's (to use Espen Aarseth's term for the person willfully experiencing an interactive environment) positioning in contemporary immersive interactive environments. It is interesting to examine this relationship now in relation to two new technologies at the turn of another century: first, webcams, and second, the positioning of subject, actor, and spectator in first person perspective 3D environments, such as virtual reality environments and certain types of computer games. In webcams, the subjects of the camera's eve not only initiate but control the discourse. 24 hour webcams like the "jennicam" keep watch over private spaces; the subject who is seen and filmed not only invites but installs the camera eye onto a stationary island to record their life as it streams by. Real life or "meatspace" is now what is off-screen, and not what is selfconsciously and often even habitually performed for the web-eye. By considering the early "chez le photographe" films in relation to interactive and streaming medias we can trace a development in the way we have perceived on-screen and off-screen space, public and private, dominant and powerless. Likewise, early erotic films with their complex triangulations of viewing spaces and the separation of identification between the gazing character onscreen and the spectator have much in common with current conventions for interaction design of 3D spaces.

Espen Aarseth identifies these three positions as *intriguee*, the target of the game's intrigue (whom he also calls the "victim"), *narratee*, for the textual space outlined for the player, and *puppet* (or avatar), the graphic character which is partially controlled by the player. To explain the difference between these three functions, he gives the example of character death: "the main character [the avatar or puppet] is simply dead, erased, and must begin again. The narratee, on the other hand, is explicitly told what happened, usually in a sarcastic manner, and offered the chance to start anew. The user, aware of all this in a way denied to the narratee, learns from the mistakes and previous experience and is able to play a different game". In other words, the avatar is at a level of focalization, the narratee is at the level of non-diegesis, and the intriguee or user is at the level of extra-diegesis.

The issue of focalization brings us back to the sensory homunculus described at the beginning of this paper. Focalization in interactive fiction works precisely in this way: we experience our bodies as having centers (the trunk and internal organs) and peripheries (limbs, hands and feet, hair). We view our centers as more important than our peripheries, so that someone who has lost a limb is still seen as the same person. This schema has three important elements: an entity, a center, and a periphery. 16 Focalized levels of narration emphasize the character's direct experience of events. This is an egocentric narrative, comparable to that of internal focalization (surface) narrative of film; the player sees directly through her avatar's eyes. Depending on the immersiveness of the virtual environment and the sensitivity of the interface, virtual reality can come very close to completely overlapping two of the apexes of the triangle: the view of the homunculus (in this case, the avatar) and the view of the user/player. However, the overlap will never be complete. To begin with, the user will always remain in meatspace, in the real world; his body can never be completely absorbed into the diegetic cyberspace. And the virtual environment has some degree of "intelligence;" some of this intelligence has been programmed into the player's avatar, so that the avatar will be able to do, or refuse to do, certain actions regardless of the desires of the player.

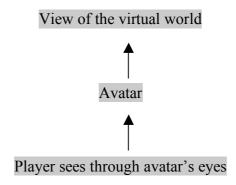


Figure 5. The Egocentric Perspective in Computer Games and Virtual Reality

Although the player cannot see her avatar, the avatar has been programmed to have a certain size – the default "height" for CAVEs (computer automated virtual environments) is six feet and the default width of the head is two feet, for example -- which means that the player cannot walk through an arch that is scaled to five feet, among other things. The avatar is usually invisible, represented on occasion by a hand that helps the user accomplish tasks in the virtual space. Some VR environments, though always egocentric, allow the user to get a glimpse of their avatar at certain moments, such as when the user looks at their reflection in a pond. This perspective is reminiscent of point-of-view shots and subjective films like LADY IN THE LAKE (Montgomery, 1947).

The Exocentric perspective of VR is analogous to what we mean by external focalization in film. Typically this results in a visible avatar that the user relates to exocentrically (as in all those over-the-shoulder games such as the *Tombraider* series where the user is always one step behind their avatar). This perspective is closer to that of the homunculus films of early cinema, because the homunculus (the avatar), though now "truly" under the control of the user, also is programmed, to an extent, to "have a mind of its own." The avatar, such as Lara Croft in *Tombraider* or Aladdin in the 3D version of *Prince of Persia*, is our homunculus, a stand-in for us in the diegesis that we identify with but whose perspective we don't always share:

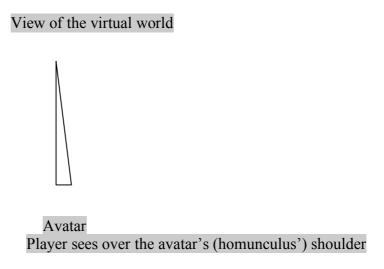
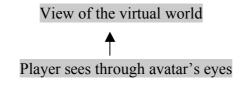


Figure 6. Perspective of over-the-shoulder games; compare to figure 3.

In most games the two perspectives are interchangeable. Even when they are not, such as in the early first-person shooter games where the player always saw through his avatar's eyes, an image of his avatar's face would be placed in the tool bar at the bottom of the screen; this face reacted as the game progressed, grimacing when the avatar took a hit or cheering when he made a successful strike in games like *Quake*.



Face of avatar (homunculus) in toolbar

Figure 7. The homunculus displaced to the toolbar.

And what about internal focalization (depth), the more complex experiences of thinking, remembering, interpreting, wondering, fearing, believing, desiring, understanding, feeling guilt, that is so well depicted in film? This is where software programming can really add something to the avatar. Leon Hunt gives the example of martial arts games, such as the *Tekken* series, which enables the user to "know Kung Fu". These games allow your avatar to incorporate the martial arts moves of various martial artists, as well as the signature gestures of various film stars playing martial artists. As a result the internal depth focalization of this avatar – it knows Kung Fu, even if its user does not – is given authenticity by extra-diegetic signs: the signature moves of well-known martial artists and the gestures of movie stars. So an avatar's skills, whether it be rogue, wizard or warrior, and any back story they care to share with their user, can all be described as internal focalization depth.

# Transferring the Homunculus Function to the Player

There are computer games and virtual reality environments where the user has no avatar at all. In tabletop VR, or god point of view games (such as most strategy games with isometric design like *Simcity* or *Civilization*) the user has a lot of control over events but no digital representation. This doesn't mean that there is no narratee position for the user. In games like *Creatures* or *Black and White*, for instance, users care for the little creatures or select which of the game's denizens will evolve and which will not. The range of possible choices and the specific choices made become the user's narratee position in the text, a position of focalization without direct representation.<sup>19</sup> In games like *Jedi Knight* the player's choices add up until the player is defined as knight on the "dark side" or the "light side" of the force.

Sequential narrative, which assumes a causal connection between a sequence of events and is seen most frequently in films and literature, does not work very well in interactive fiction. This means that the narratee position is weaker in interactive fiction than in sequential fiction. The user is also limited in how much control she has over the avatar; she can dictate most of its moves, depending on her skill level, but not too much of its basic programming (its internal focalization), except by choosing

which game to play. In computer games, total immersion in the story-world is not the goal, as it is in classical cinematic narration. The aim is a combination of immersion (involvement with the story at the diegetic level) and engagement (involvement with the game at a strategic, or non-diegetic level).<sup>20</sup>

I am not arguing that the relationship between player and avatar is the same as that between early film spectator and homunculus (the figure often found at a right angle to the "empty placement of the spectator-subject"). But a careful analysis of the complexities of these early homunculus films gives us insight into the relationships between avatar, player, and player perspective in virtual space. What we learn from early cinema is that the homunculus function is a moveable one. Once we know this we can trace its displacement from avatar to player and sometimes back to avatar (depending on the way the game is programmed). The key is to accept the homunculus analogy as simply that, an analogy, that helps us understand what we are seeing.

In early cinema the spectator had no control over their homunculus; they could only enjoy their privileged view, and the photographer character in the film had all the capability for action. In virtual reality environments the reverse is true: Aarseth calls the avatar a "puppet" for a reason, because the player is the source of its movement and most of its choices. Armed with this understanding we can now trace hierarchical relationships between homunculi on film or in 3D game and spectator or player based on their degree of agency. For example, in *The Sims*, players can direct their Sim characters to eat dinner, go to bed, or put out a fire; but even if hungry the Sim characters can resist food or choose to paint a painting while their house burns down around them.

Rather than accept Gunning and Gaudreault's term "cinema of attractions" as a definition of a period in film history (usually defined as 1896 to 1904), we need to see attractions as only one aesthetic possibility chosen by filmmakers of the time. In this paper I have identified another possibility that was quite common in early cinema, which I call "homunculus films", and whose sophistication we can only appreciate now that we see it re-emerging in interactive narratives. This is an approach that *combines* the creation of a diegetic universe through narrative with an extra-diegetic engagement for the spectator by aligning the spectator with the camera position but separate from the characters in the diegesis. After a century of near-domination of "seamless" classical cinematic narrative, we are seeing a revival of other early cinematic approaches in interactive art forms, with their attendant complexities, specificities, and promise for the future.

## **Notes**

<sup>&</sup>lt;sup>1</sup> Charles Musser, "Rethinking Early Cinema: Cinema of Attractions and Narrativity," *The Yale Journal of Criticism*, vol. 7, no. 2 (1994). See dossier of this volume.

<sup>&</sup>lt;sup>2</sup> Alison McMahan, *Alice Guy Blaché, Lost Visionary of the Cinema* (New York: Continuum, 2002) pp. 32-36.

<sup>&</sup>lt;sup>3</sup> <a href="http://en.wikipedia.org/wiki/Homunculus">http://en.wikipedia.org/wiki/Homunculus</a> Referring to Gregory, Richard L., Eye and Brain: The Psychology of Seeing (Oxford: Oxford University Press, 1990) and The Oxford Companion to Mind (Oxford: Oxford University Press, 1987).

¹ Ibid.

<sup>&</sup>lt;sup>5</sup> Gaumont no. 120, Lumière no. 118. The Lumière film can be seen on the Kino Video Series, *The Movies Begin*, vol. I. For a detailed comparison of Alice Guy's remakes of Lumière films, see McMahan, op. cit., pp. 23-30.

- <sup>6</sup> All of the Edison films described in this paper can be seen on the Kino DVD, *Edison: The Invention of the Movies*, disc 1.
- <sup>7</sup> Tom Gunning, "What I saw from the Rear Window of the Hôtel des Folies-Dramatiques," in André Gaudreault, *Ce que je vois de mon ciné*. . . (Paris: Méridiens-Klincksieck, 1988), p. 37. Gunning takes over this distinction between *ocularization* and *focalization*, with some modification, from François Jost, *Loeil-Caméra*: *Entre film et roman* (Lyon: Presses Universitaires de Lyon, 1987).
- <sup>8</sup> Richard Abel, *The Ciné goes to Town: French Cinema 1896-1914* (Berkeley: University of California Press, 1994), pp. 117-121.
- <sup>9</sup> Elena Dagrada, "Through the Keyhole: Spectators and Matte Shots in Early Cinema," *Iris: Early Cinema Audiences/Les spectatuers au début du cinema*, no. 11 (Summer 1990), p. 99.

<sup>10</sup> Ibid. p. 100.

<sup>11</sup> Gunning, op. cit., p. 35.

<sup>12</sup> Ibid. p. 42 fn 19.

- <sup>13</sup> "I won't! I won't! I'll eat the camera first." Gentleman reading, finds a camera fiend with his head under a cloth, focusing him up. He orders him off, approaching nearer and nearer, gesticulating and ordering the photographer off, until his head fills the picture, and finally his mouth only occupies the screen. He opens it, and first the camera, and then the operator disappear inside. He retires munching him up and expressing his great satisfaction. Liner notes for *The Movies Begin*, vol. II: *The European Pioneers*, Kino Video, 1994.
- <sup>14</sup> Christian Metz, *The Imaginary Signifier: Psychoanalysis and the Cinema* (Bloomington: Indiana University Press, 1982), p.55.
- <sup>15</sup> Espen J. Aarseth, *Cybertext: Perspectives on Ergodic Literature* (Baltimore: The John Hopkins University Press, 1997), p. 113; quoting Espen J. Aarseth, "Nonlinearity and Literary Theory," in George P. Landow (ed.), *Hyper/Text/Theory* (Baltimore: John Hopkins University Press, 1994), pp. 73-74
- George Lakoff, Women, Fire and Dangerous Things: What Categories Reveal About the Mind (Chicago: University of Chicago Press, 1987), p. 274.
- William R. Sherman and Alain B. Craig, *Understanding Virtual Reality: Interface, Application and Design*. (Amsterdam et al: Morgan Kaufman Publishers, 2003), p. 466.
- <sup>18</sup> Leon Hunt, "'I know Kung Fu!' The martial Arts in the Age of Digital Reproduction," in Geoff King and Taynya Krzywinska (eds.), *ScreenPlay:cinema/videogames/interfaces* (London and New York: Wallflower Press, 2002), pp. 194-205.
- <sup>19</sup> Alison McMahan, "Immersion, Engagement and Presence: A Method for Analyzing 3-D Video Games," in Mark Wolf and Bernard Perron (eds.), *The Video Game Theory Reader* (Routledge, 2003), pp. 67-86.
- <sup>26</sup> Alison McMahan and Warren Buckland, "The Cognitive Semiotics of Virtual Reality," Virtual Reality International, an affiliated Conference of the Human Computer Interaction (HCI) International Conference, Las Vegas, July 2005.