Mechanical Humanity, or How I Learned to Stop Worrying and Love the Android: the Posthuman Subject in *2001: A Space Odyssey* and *Artificial Intelligence: A.I.*

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In the mid-1990s, Stanley Kubrick contacted Steven Spielberg with an idea for a project he had been working on for several years. The script was based on Brian Aldiss's short story "Supertoys Last All Summer Long," which Kubrick bought the rights to in 1983, three years after the release of *The Shining*, and 15 years after the release of the film it was thematically much closer to: *2001: A Space Odyssey*, based on Arthur C. Clarke's "The Sentinel." "Supertoys" is a story about artificial intelligence and, as in *2001*, about how artificially intelligent machines and humans interact. There were various impediments, though, that kept Kubrick from making this film. For one, the story revolves around an artificial boy, and British law made it prohibitive to work for the prolonged periods of time with a child actor that Kubrick would have required. And he was not willing to make the film elsewhere. After failed attempts to construct a robot that would satisfactorily take the place of the child actor, and although Kubrick had invested years of work in the project, for which he already had a script and hundreds of storyboards, he offered it to Spielberg, and proposed that he produce it while Spielberg directed it. According to Spielberg and longtime Kubrick producer Jan Harlan, Kubrick offered Spielberg the project as opposed to shelving it because he felt that Spielberg had the right sensibilities for this story.

Spielberg was hesitant, though, and it wasn't until after Kubrick's death, when his wife, Christiane, contacted Spielberg and renewed the offer, that Spielberg took over *A.I.* and made it his own. As Harlan has suggested in interviews, *A.I.* is clearly a Spielberg film, and would have been much darker had Kubrick filmed it. Still, we can see traces of Kubrick at work in *A.I.*

A.I. recalls *2001* in various ways: in both films, the plot revolves around an artificially intelligent entity and the question of the role this entity plays within the human community. There are also various overlappings between the cyborgian boy David[1] (Haley Joel Osment) and the super-computer HAL (voice, Douglas Rain) in terms of what they in fact are: machines created for social use/benefit, that are highly intelligent,

which develop personalities and human attachments, and so forth. Inevitably, there are also overlappings in terms of what they represent: a fear of technology insofar as it threatens the distinction between the human and the non-human. Of interest to our overall discussion will be to note the structural and thematic similarities between these films, but also to note where *A.I.* departs and clearly becomes a Spielberg project.

From the outset, we can identify departure in the philosophical tradition the respective projects are rooted in: *2001* is framed within the tradition of Darwinian *evolution* and *survival of the fittest*, where *A.I.* is framed within the tradition of the Freudian *Oedipus Complex*. Both, however, are firmly rooted in the more contemporary philosophical framework of the postmodern and the posthuman. They each raise questions of authenticity and subjectivity by juxtaposing the human and the machine. Accompanying these uncanny juxtaposings, and in order to problematize certain notions about subjectivity, there is an elaboration on the human qualities and characteristics of the artificial beings. Both films depict human communities within which AIs - artificially intelligent machines or, in this case, human-like non-humans - have already been integrated to a certain degree. The boarders between the human and the non-human are conspicuously ambiguous or even fluid, and in this regard, these are posthuman narratives.

HAL's possession of survival instincts and David's Oedipal love for his mother place both narratives in philosophical traditions that attempt to define what, precisely, the human animal consists in. Recognizing that the films share this element, we might ask what the effect of thus portraying the artificial is. As we will see, both films portray the artificial entity as a 'subject', in the psychoanalytical or Lacanian sense, and in so doing, they comment on the status of postmodern/posthuman subjectivity, on contemporary notions of subject formation, and on anxieties associated with them. Within these communities, what we witness is the introduction of an AI to a human community, followed by a crisis that is staged in order to give utterance to particular anxieties about humanist notions of autonomy, free will and individuality - anxieties about the very borders between the human and the non-human.

2001: A Human Oddity, Posthuman Normality

In considering the relationship between humans and non-humans within these fictive communities, the first question we want to ask has to do with intent and practice: What are the machines intended for, and how are they, in fact, used? In *2001*, HAL's purpose and his practical application are very utilitarian in nature. He was built as a highly advanced *tool*. This focus on the tool and its relationship to human 'advancement' is signaled at the beginning of the film, when we witness what we assume to be a moment critical to the evolutionary development of Homo sapiens. A Neanderthal-like ape-man discovers that it can use a bone to defeat opposing tribes and to kill animals for food, and thus advance along the evolutionary scale within Darwin's logic of the survival of the fittest. The bone as a tool is then equated to the satellite we will see in the following sequence: when the ape-man throws the bone up into the air, we witness it spiraling against the sky, and then there is a jump cut to a satellite platform with a similar form floating through space. What is signaled here is an advance in technology that accompanies an advance in human evolution. This 'advance', though, is ambiguous, as both images are of tools potentially used for killing (the satellite we see here is intended for carrying nuclear warheads[2]). Also ambiguous is the lack of a subtitle separating "The Dawn of Man" from 'modern' man at the initial cut to the satellite (as we know, subsequent shifts in time are indicated throughout the film).

Regarding HAL's function, we soon find out that he is used for overseeing and attending to the details of a mission to Jupiter. In an earth to spacecraft interview by BBC news, the interviewer (Martin Amor) notes:

> HAL, you have an enormous responsibility on the mission, in many ways perhaps the greatest responsibility of any single mission element. You are the brain and central nervous system of the ship. And your responsibilities include watching over the men in hibernation.

From this and other comments, we later come to find out that not only is HAL in command of the entire journey, he is also the only 'crew member' that knows what the purpose of the mission in fact is. The tone of HAL's 'humanness' is already set here by attributing to him anthropomorphic features ("the brain and central nervous system") and is further suggestive of HAL's human-like relation to the other crew-members. HAL is

clearly an active part of this team. The humans themselves are, by contrast, framed as being 'just along for the ride', so to speak. The majority of them are in hibernation for the voyage while HAL navigates the ship. The two crewmembers who are awake, Dr. Bowman (Keir Dullea) and Dr. Poole (Gary Lockwood), are seen eating, jogging, playing chess, drawing, sun-bathing (in a sun bed), and giving interviews. What we do not see them doing is working. This is thrown into even starker contrast when we find out that they don't know what the purpose of the mission is. It is as if the 'human resources' on board are precisely that: resources or tools waiting to be put to use. Thus, we might say that HAL is a *working* machine. He does everything from enabling humans to travel to places they would never reach without such magnificent tools, to keeping a crew psychology report. It's also worth noting that, beyond attending to mission responsibilities, HAL also engages in recreational activities with the crewmembers. In this sense, his place in this community may be of a utilitarian nature, but he interacts with the other members as an equal (or even a superior), rather than as a tool.

In *A.I.* we might say that David, on the other hand, is really a luxury item. He is intended to replace a lacking 'real' child. As the narrator in the prologue (voice, Ben Kingsley) informs us, "when most governments in the developed world introduced legal sanctions to strictly license pregnancies…robots, who are never hungry and who did not consume resources beyond those of their first manufacture, were so essential an economic link in the chain mail of society." And as we find out in the beginning of the film, Professor Hobby's (William Hurt) intention is to create an artificially intelligent machine that can love. When we later find out that David is modeled after Hobby's own deceased child, the impulse behind David's creation becomes all too obvious. David is born out of loss and mourning. He is born out of emotional need, and this is precisely the capacity in which he functions in his new home. One of Professor Hobby's employees, whose son has been in a comma for a prolonged period of time, is given the opportunity to take David home as an artificial adoptive son. Obviously, David's purpose and practical application must be less clinical than the application of a common tool. There must be emotional dimensions to the relationships that develop here.

Although David's relation to his 'mommy', Monica (Frances O'Connor), is necessarily of a pathetic nature, and HAL's to the rest of the crew isn't, the relationships

in both films share a surprisingly similar structure. In each there is a particular dependency in which power relations are formed and which symbolically situates all parties involved. HAL is in charge of ship operations, and the crew depends upon him for the success of the mission. Beyond this, when we take into consideration the crewmembers who are in 'hibernation', we realize that their lives depend upon HAL's functioning properly. David returns meaning to his adoptive mother's life, and she becomes emotionally dependant on him as well - as we will see - as he does on her. As to the machines fulfilling their respective roles in these relationships, we might say that they take their tasks 'to heart' all too literally. HAL, who has been interpellated as the perfect computer, infallible, superior to humans in efficiency and capacity for learning, retaining, and processing information (his name is an acronym of 'heuristic' and 'algorithmic'), not only boasts of his capacities when given the opportunity; when he is confronted with the possibility of a malfunction, he doesn't even consider that there might really be something wrong with him. Instead, he suggests that the problem is due to human error. Similarly, David is unable to fathom a change in his (symbolic) function. His interpellation operates as a type of 'hardwiring' that cannot be changed. He has been turned into a 'loving machine', and can do nothing other then be precisely that. Interestingly, this exactness of the machine, that they appear to ardently take up the task for which they've been programmed, plays a role in the development of threat, and how all parties will react to it. Before moving on to the element of threat, however, we should consider how the relationships between the humans and the non-humans develop. We will see that the relationships that develop necessarily entail an element of *interpellation*, and that the symbolic function at work here is modeled on postmodern notions of identity building in human communities. Both films are posthuman narratives insofar as they explicitly deal with non-human entities that have human characteristics. In this regard we might say they are approaching the posthuman through the back door: the point is not that humans have integrated the 'non-human' or the external to the extent that the boundaries of the human implode, but rather that the machines have become so humanlike that the boundaries of the 'non-human', and thus dialectically the human, implode.

The Posthuman Subject: *It's Alive!*

> *Of all the implications that the first wave of cybernetics conveyed, perhaps none was more disturbing than the idea that the boundaries of the human subject are constructed rather than given.*[3]

What we recognize as *posthuman* is in many ways an extension of the implications of postmodernism at the location of 'the body' *and* the subject: Where postmodernism is based in concepts of fracture, pastiche, 'native' instability, and dissemination, posthuman(ism) applies them to bodies as they become increasingly cyborgian and recognizes the nature of subjectivity and identity as inextricably dependant on a collection of 'external' factors, finally making the claim that due to the extimate nature of subjectivity and identity, we are all ultimately cyborgian. In this regard, posthuman ideology is thoroughly, if implicitly, Lacanian: "the subject's 'decentrement' is original and constitutive; 'I' am from the very outset 'outside myself', a *bricolage* of external components."[4]

In *2001* and *A.I.* the posthuman takes an extreme physical form: HAL and David are entirely composed of/by the external. HAL was built at the H.A.L. laboratory in Urbana, Illinois and 'instructed' by Mr. Langley. David was designed by Professor Hobby and manufactured at Cybertronics. We might read these 'embodyings' as tropes for what is at stake in postmodern and posthuman notions of subjectivity. It is often the case in cyborgian and posthuman narratives (from *Frankenstein* to the latest adaptation of a Philip K. Dick story), that we, the viewer/reader, are confronted with a human-like artificial entity in a manner likely to align our sympathies, to whatever extent, with the artificial being. This is an essential device in blurring the boarders of the human and the artificial, which further works in the service of formulating the skeptic's questions about the nature and origins of identity at the heart of a postmodern/posthuman view of subjectivity: do we view identity, first of all, as a construct? If so, do we consider the processes involved to be *natural* or *artificial*? If natural, what does this say about the acquisition of identity where the artificial being is concerned? If artificial, what does it say about acquisition of identity concerning 'natural' beings? If we are to understand the processes involved in the production of identity in Althusserian terms, then we know that this is an ongoing process that extends beyond the limits of the physical individual in

both directions (before birth and after death), and that it is a constructive, constitutive process in the sense that it continually (re)locates the subject. Addressing the question of a difference in the quality of identity between the natural and artificial being, we are on unstable ground from the start. Note that if we replace the word 'being' with 'subject', the distinction becomes much more problematic. How do we determine what is an artificial subject and what a natural one? Again following Althusser, identity is a social (or socio-ideological) process, whether public or private, of construction – a social production. In order to discuss how these concepts are manifest in *2001* and *A.I.*, we should briefly outline Althusser's concept of *interpellation*.

In "Ideology and Ideological State Aparatuses," Louis Althusser defines interpellation as a mechanism in which the individual is *hailed* into subjectivity. The locations at which this occurs and the agents involved are always already within ideology: ideological (state) apparatuses such as schools, family, religion, political parties, profession, and so forth, repeatedly hail the individual as a subject. They locate the individual within the ideological (and symbolic) structure in his/her/its symbolic relation to other subjects. As Althusser makes clear, these are inextricable, circular terms: ideology and interpellation consist of and constitute each other. For the sake of clarity, he gives them a 'temporal form' in which to discuss them, though admitting that they do not properly exist within a temporal order. We can think of this in terms of the use of names and titles. For example, when one is called by one's name, 'Pat', and responds, both actions entail the silent acknowledgement of rich identification and history. The hailing person or structure locates the individual, identifies her/him, as, for example, Pat, son of *w*, works at *x*, believes in *y*, identifies with *z*. The individual hailed acknowledges that s/he is all of these things (or not, that there has been a mistake), all of the things enacted by her/himself in life, and all that s/he 'absorbs' from others' projections of her/him, by recognizing the call and responding to it. Thus, a perpetual reestablishing/affirmation of position within the social-symbolic takes place, by which not only is the hailed subject located, but, by being located in relation to all the subtle and not so subtle conditions of the life surrounding – in a word, everything – interpellation functions in an omni-directional manner, situating all subjects. *A.I.* stages a good, if over-simplified, model of interpellation.

IMPRINTING PROTOCAL
CAUTION:
Please remember that this
Program, once activated,
is permanent, indelible,
and unalterable.[5]

The cyborg boy is intended as an emotional crutch, so to speak, functioning as an *Ersatzkind* for the mother. We realize by this point that we are dealing with a narrative about the familial symbolic network and positions within it, and in this capacity, with identity. The automaton, David, is not meant to replace the biological child *per se*, but rather to act as a stand in, to stand in the symbolic position of the absent biological child for the time being. Shortly after Henry (Sam Robards) brings David home to Monica, he tells her about the process of 'imprinting' and the magnitude of their responsibility concerning the process. Imprinting irrevocably binds David to the person who imprints him by programming him with 'love' for this person.

The italicized text above the preceding paragraph is what is printed on the cover of the protocol pamphlet for David's so-called imprinting. Two days after the husband has '*delivered*' David, Monica decides to keep him, to go through with the process of imprinting, and grant him the symbolic position that belonged to her biological son. The process entails holding the back of David's neck, and reading the following words: Cyrus, Socrates, particle, decibel, hurricane, dolphin, tulip, Monica, David, Monica. The most important words, according to our purpose, are the names at the end. We might read this scene jointly as a mirror scene, dictating who and what one is by reflecting off of an other, and as a scene of initial interpellation, primarily defining two individuals in there relationship to one another. The result of the imprinting, of this mirror, or initial interpellation, is that it establishes positions, relationships, within a symbolic network, and thus establishes identities. The dialogue that ensues gives emphasis to this point. After Monica imprints David - activating his love for her and thereby defining his symbolic position in relation to her – he mirrors the gesture and does the same in response: he calls her 'mommy', after which she asks, "what did you call me," and he repeats it, which prompts her to tellingly ask in response, "who am I David?" David tells

her, "you're my mommy." Monica is immediately returned to the symbolic location of mother, as needed and loved by a son. Through this scene of initial interpellation and subsequent scenes that reinforce their symbolic positions in relation to one another, David has been *irreversibly* called into the position of the son.

In *2001*, HAL may not be 'imprinted with love' for another character in the film, but we can see from the scenes concerning his introduction and his relationship to the crewmembers, that he is in fact 'defined' or interpellated via his relationships to the crewmembers. In this regard, HAL's introduction equally focuses on his symbolic relations, that he in fact occupies a position of subjectivity within a symbolic network, and in so doing, indicates to the viewer that he is interpellated accordingly: "you think of him really just as an other person."[6] HAL takes the role of a formidable though polite chess opponent, engaging in leisure activities with the crew. He shows interest in Dr. Bowman's artistic renditions of the ship's interior and asks "personal questions" based on his sensitivity to Bowman's behavior. Though all of these instances also serve to build HAL into a character that a viewer can potentially identify/sympathize with by giving him human characteristics, what I wish to stress here is the interactivity between the crew and HAL, and that this interactive display of recognition contributes largely to identity/identification: these are illustrations of interpellative (*identity building*) situations. By situating these artificial entities within human communities and interpellating them, the boundaries between the human and the non-human become less clear. As I've noted, this blurring of boundaries is helped along by giving the machines human characteristics. It's also helped along by 'de-humanizing' the humans.

Humanized Machines and Mechanized Humans

2001 introduces super-computer HAL9000 directly within the context of 'his' relation to the human crewmembers, and sets the tone for HAL as a sensitive and sensible entity with human characteristics. In the BBC interview broadcast back to the ship, HAL is questioned as to whether, despite his "enormous intellect," he is ever "frustrated by your dependence on people to carry out actions." To which he responds, "not in the slightest bit. I *enjoy* working with people. I have a *stimulating relationship* with doctor Poole and

doctor Bowman. My mission responsibilities range over the entire operation of the ship, so I am constantly occupied. I am putting myself to the fullest possible use, which is all, *I think*, that any *conscious entity* can ever hope to do."[7] HAL's interjection "I think," recalls Descartes's '*cogito ergo sum'*, immediately situating HAL within the Cartesian tradition as a 'thinking thing' - *res cogitans* - which effectually equates HAL with the human: "A thing that doubts, understands, affirms, denies, is willing, is unwilling, and also imagines and has sensory perceptions."[8] We witness HAL do all of these things, from his 'doubts' concerning the mission to his being able to imagine the consequences of being shut down. It's worth noting that reference to Descartes' *cogito* becomes more and more the slogan of posthuman, cyborgian self reification within the genre and is always employed to indicate that characteristics elementally human can equally be found within the artificial.[9] Notably, *A.I.*'s Gigolo Joe (Jude Law) will proclaim "I am!," in his last scene, complimenting HAL's "I think." HAL's overall 'choice' of words here is telling.

As Randy Rasmussen points out in *Stanley Kubrick: Seven Films Analyzed*, HAL's ability to think is not his only humanizing character: "…the words 'I enjoy' imply that emotion is indeed a factor in his [HAL's] perceptions."[10] The same can be said of the fact that HAL defines his relationship with the humans as "stimulating." When Dr. Poole is questioned as to what it's like to live and work in such close proximity to HAL, he responds that HAL is "just like a sixth member of the crew," and that you come to "think of him really just as an other person." When questioned as to whether he believes that HAL has genuine emotions, Dr. Poole responds that "he acts like he has genuine emotions." Which he then qualifies with, "of course he's programmed that way to make it easier for us to talk to him. But as to whether or not he has real feelings is something I don't think anyone can truthfully answer." The scene ends with this rather pregnant statement, signaling an enigma or an impasse at the heart of the human-machine relationship. This impasse, this diegetic tension, is not resolved in the narrative, but rather takes up a key position vis-à-vis human subjectivity, providing a structure in which 'artificial' subjectivity acts as a mirror to human subjectivity.

Where HAL incorporates human characteristics at the site of the artificial, Poole and Bowman do precisely the opposite: they embody an uncanny, machine-like lack of the human. For example, when Dr. Poole receives a video transmission from his parents on

earth, wishing him a happy birthday, his reaction appears to be restive and he shows no clear signs of emotional response. In fact, Dr. Poole rarely shows signs of emotional response. Upon closing the transmission, HAL also wishes Dr. Poole a happy birthday, "happy birthday Frank," to which he responds, "thank you HAL." HAL's gesture to Dr. Poole mirrors the behavior of Poole's family - human behavior - while Dr. Poole's behavior doesn't seem to distinguish between the human and the artificial. In *Stanley Kubrick und seine Filme*, Georg Seesslen points out that "…the human itself has become a mechanical being…"[11] Kubrick further underlines this element in the scene where HAL asks to see Dave's (Bowman) drawings. All of them are of the crewmembers within their hibernation units, which, as is later made thoroughly explicit, they are entirely dependant on for life support. They look like mechanical cocoons (this, like the image we first see of Martin, whose is also in an artificial state of suspended animation, visually epitomizes what is at stake in the concept of the cyborgian). Furthermore, we view these images through HAL's perspective. This provides a maximum distance to the human, as there are three 'lenses' or windows we are looking through here (four if we count Kubrick's camera): HAL's eye, the drawing itself, and within the drawing, the screen-like window of the hibernation unit where we see the crewmember's face. And, moreover, not unlike Magritte's famous *Ceci n'est pas une pipe* - this is not a human, but a representation of a human.

Again, all of this becomes meaningful when placed in contrast to HAL's humanness. Thus we have a juxtapositioning which destabilizes positions of viewer identification and, with it, the boarders of the human and the non-human: "If in HAL we see Kubrick's vision of the machine becoming human, in Bowman and Poole we observe how humans are becoming dehumanized and machinelike because of their close association with technological 'offspring'."[12] Kubrick is, though, somewhat ambiguous here. Although he inverts human and machine characteristics, he is not necessarily moralistic about it.[13] We are not rooting for one over the other from the outset. Rather these 'personality' characteristics at the location of the artificial are presented in a manner that encourages us to identify with the machine, while the machine-like behavior of the humans provides a certain distance.[14]

Where Kubrick employs the element of ambiguity, Spielberg is clear about whom he wants us to identify with. In *A.I.*, a young couple must come to terms with the loss of their child. They should be in the process of mourning, we are informed, though the child is still alive. While visiting their son, who is in a coma and being cryogenically kept in a state of suspended animation, a doctor explains that after five years of this condition, the parents instincts instruct them to mourn. He goes on to explain that, though the child may be lost, there is hope for the well being of the mother. Shortly after, the husband brings home a 'Mecha'-child; a mechanical child. The scene opens with the mother waiting at home in front of an elevator, from which the husband emerges. After an awkward exchange in which Monica utters his name, "Henry," and Henry responds, "don't kill me. I love you. Don't kill me,"[15] David enters the house in an uncannily human manner. He walks in, steps from a carpeted surface onto a wood surface and, noticing the difference, taps his foot. The suggestion or indication here is that he is an aware, sentient being who takes in and processes information based on independent experience. He, like HAL, is also a heuristic algorithmic machine. David then turns to Monica, says, "I like your floor," and we get a close-up of him as he smiles. The possibility of David not being human is imperceptible at this point. In the following scene, in the bedroom now, Monica is crying as she yells at Henry: "I can't accept this! There is no substitute for your own child… What were you thinking?!" But then immediately followed by "I don't know what to do… Did you see his face? He's so real."

Against David's 'realness', and in order to generate viewer sympathy and identification with android, the humans are portrayed as brutal, unemotional, naïve, self-consumed, immoral, etc. In *A.I.* we are confronted with a stark contrast between humans and androids in which almost every human is in some capacity unappealing: where Kubrick's characters are un-human, Spielberg's are inhumane. The human child Martin (Jake Thomas) is by far the most unappealing: he is malicious, devious, dishonest, selfish, destructive and generally uncongenial. Henry, the father, is an uninteresting, marginally developed character, having no authority and rarely an opinion of his own, he is a virtual void in the narrative. Monica, more tolerable, is also portrayed as immature, insecure, irresponsibly and unreflectively engaging her desires and anxieties. Professor Hobby, despite his benevolent father-like tone and manner, really has to bear the brunt of

what goes wrong here between the humans and the machines: he is selfish and self-aggrandized, with his fantasies of being a god-like creator, and, most importantly, he exhibits a lack of concern for the moral consequences of his work. In contrast to these are all of the 'Mechas'. Teddy (voice, Jack Angel) the supertoy is reflective, helpful, honest, has a sense of moral integrity and solidarity. Gigolo Joe also has a sense of solidarity, is helpful, resourceful/clever, and charming. David, finally, like Spielberg's E.T., is the innocent child-like other. Frightened, lost, trying to find his way back home, we can't but sympathize with him. Built as a model of Dr. Hobby's own dead child, he cannot be other than an idealized, perfect (dare we say it: 'model') child.

Though the 'human element' of the intelligent machine may be framed more blatantly than in *2001* - through David's appearance, but also through identifying him as an emotional, suffering boy - we can see parallels between HAL's and David's introduction insofar as both scenes foreground the machines' human characteristics, focus on their potential role among humans, and, importantly, present the possibility of destabilizing the human community.

Both *A.I.* and *2001* employ various tropes and motifs in order to signal the artificial being's humanness. In *2001*, when Dr. Bowman is removing the memory cards from HAL (a representative central nervous system), HAL pleads with him to stop, saying he's frightened, and then he says, "Dave, my mind is going," which once again brings us back to Descartes and the self-conscious subject. Similarly, in *A.I.* when David returns to professor Hobby toward the end of the film, hoping to be turned into a real boy, and is informed that neither is he one of a kind nor is there a Blue Fairy who can grant him his wish, he replies, "my brain is falling out." Each moment of the artificial being declaring the status of its *mind* - that it in fact possesses a mind - is accompanied by a highpoint in the explication of the android's humanness. In *A.I.* it is at this point that we witness the culmination of David's travels, that he indeed has the 'determination' and *drive* of a human, and that, at seeing a simulacra of himself, he reacts with a human hysteria and violence that even the android Gigolo Joe cannot fathom. In *2001* it is HAL's pleading for his life, the repetition of the statements "I'm afraid" and "I can feel it," and the singing of the song his instructor, Mr. Langley, taught him. Another trope brought into focus here, and used as a motif throughout the film, is HAL's uncanny eye. While HAL

is being ‘disconnected’, we get a close-up of his eye, evidence of his 'being-ness', which fades away and finally disappears as he sings his last words.[16] The fading of the eye here is used to signal HAL’s death, like so many other death scenes in which death is signaled by an inertia and closing of the eyes. The eye as a motif to signal humanness, and particularly uncanny humanness, has a substantial tradition, markedly beginning with Freud's reading of E.T.A. Hoffmann's *The Sandman* and moving onward to contemporary science fiction film.

The Window to the Soul: Uncanny Eyes and Canny Others

Before any narrative information is provided on HAL, our first visual of him is a shot of what would be considered his eye: a type of camera with a red light at the center, like a pupil, not unlike Schwarzenegger’s unmasked eye in *Terminator*. Where *Terminator* is explicit in framing the uncanniness of the artificial eye, or rather the uncanniness of being able to dress it in an appearance so human-like (which the Teminator expels from its socket, only to illustrate that it is the uncanny other eye doing the real work), *2001* is perhaps somewhat subtler. Nevertheless, the suggestion that this eye marks uncanniness eventually becomes explicit. During the BBC interview mentioned earlier, while presenting HAL, both the BBC camera and the lens through which we, the audience, view the scene are focused on a panel of monitors at the center of which is HAL’s eye. When questioned on his confidence in his own abilities, the camera (Kubrick’s) moves to a close-up of the eye where we are confronted by its red pupil as HAL, in a very matter-of-fact tone (“let me put it this way…”), explains his reliability. Throughout this segment of the film, Kubrick frames this eye as ‘watching’ the crewmembers, and when there is interaction with HAL, we are usually shown his eye when he speaks. Later, as we know, it will be strictly through the use of his eye that HAL perceives the threat to his own existence. Although associations between the eye and the human are rather common (with such proverbs as ‘the eye is the window to the soul’), Kubrick’s particular use of the eye as an indication/suggestion of the human and the uncanny effect of its presence in the artificial being has left a legacy to film-making. It was by no means lost on James

Cameron and certainly not on Ridley Scott, where in *Blade Runner* it becomes a leitmotif.[17]

In *Das Unheimliche*, "The Uncanny," Freud explicates the meaning of the uncanny, in part, through a reading of E.T.A. Hoffmann's *Der Sandmann*, which is about a man who steals little children's eyes and, not incidentally, also about an automaton. In the story, the protagonist Nathaniel thinks back on the death of his father and on his father's associate, Coppelius, who, according to Nathaniel's memory, killed his father and tried to burn Nathaniel's eyes out, equating him with the bedtime story of the Sandman. As the tale goes, the Sandman steals little children's eye and feeds them to his own bird-like children. Already in the element of anxiety about losing one's eye, there is the implicit reference to Oedipus the King, who gouges his own eyes out upon discovering that he has wed his own mother, Jocasta. Later, in his adult life, Nathaniel meets an optician named Coppola, who suspiciously reminds him of Coppelius from his childhood. Shortly after this meeting, Nathaniel discovers that his neighbor has a beautiful daughter and falls in love with her, only to find out that she is an automaton, and that Coppola has supplied her with her human eyes. After being witness to an incident in which Coppola and the neighbor fight over the 'daughter', and Coppola runs off with her, Olympia, leaving only her eyes behind (inverting the story of the Sandman who runs off with the eyes, leaving the body behind), Nathaniel falls into a fit of illness similar to the one he had when he was first threatened by Coppelius as a boy. Once he's recovered, he is out for a walk with Clara, his wife-to-be, when they decide to climb the tower at the town hall. From the tower, Nathaniel first notices Olympia among the crowd below, which provokes the onset of yet another fit, and then he notices Coppelius, at the sight of whom he throws himself from the tower.

As Freud makes clear, moments of trauma in the story are continually related to the eyes and to those interested in obtaining or somehow manipulating them - the threatening, ever-present Other: "The end of the story exposes that the optician Coppola is really both the solicitor Coppelius and the Sandman."[18] The motifs at work here - that of not being able to determine the living from the non-living (Olympia), that of ghosts of the past returning (Coppelius/Coppola), and that of disembodied eyes - are bound together in the element of threat. According to Freud's reading, this moment of

frightening uncanny recognition is always accompanied by a threat. The threat at work in *The Sandman* is that Nathaniel will either lose his eyes, or his object of love. Also, as Freud points out, we should recognize that this threat is one particularly associated with castration anxiety, the impetus for which becomes clear upon analysis of the scenes in which the Sandman/Coppelius/Coppola appears. Coppelius - who threateningly appears when Nathaniel is hiding in his father's study, when Nathaniel falls in love with the automaton, and shortly before Nathaniel is to marry Clara - represents the ('evil') father's castrative 'No!' This, castration anxiety, is precisely what is at work in Spielberg's Oedipal fairytale.

Where HAL's uncanniness is signaled through his glowing and all seeing red eye, David's uncanniness takes shape in his extreme similarity to a human boy. Like the automaton with the real human eyes, he is the automaton we cannot differentiate from the real human. In addition to this, it is precisely his access to his mother and the love he might get from her that is threatened (as Nathaniel's love to a woman is repeatedly threatened by the appearance of Coppola/Coppelius). Here, castration anxiety does not only take place at the location of the human subject, but at the location of the uncanny non-human other, and it is signaled by the return of 'canny' double, Martin.

Miraculously resuscitated, Monica and Henry bring Martin home. They enter the house in a manner similar to David's initial entrance, and when they do, roles begin to vacillate and turn over. David, waiting at the elevator on the house's interior, is now situated in the position Monica was upon David's own arrival. With the introduction of an important new element into his family life, it is now his symbolic status that will be altered. Monica, entering the house from the elevator and approaching David, takes the position Henry was in. She is the bearer of some important news about the introduction of a new element into this community, an element that will, once again, disrupt and alter. Martin, replete with synthetic (mechanical) hardware and systems which provide for his mobility, regulate his breathing, monitor his vital signs, and feed him the necessary drugs, has become a proper cyborg, a human mechanized, and is now in the position David, the machine humanized, briefly held. As a dramatic inversion of David's unassisted and uncanny entry into the house, Martin descends the staircase in a wheelchair.

Monica approaches David, takes him by the shoulder and turns him twice: first slightly away from Martin and the nurse, so the frame captures only the two of them against the backdrop of a window, indicating both that we are at a decisive, peripatetic moment in our narrative – a 'turning point' made literal – and framing a delineation of the (symbolic) location of this change (the home/family); then, she turns him back toward Martin and the camera pans across the room so they are foregrounded on top of Martin's position as she begins to explain, "the most wonderful thing in the world has happened." Monica backs away from David and, placing her hand now on Martin's shoulder, says, "this is Martin. This is my son." David's position once again becomes unclear. The exclusive 'access' to his mother has suddenly been compromised. The similarities between the scene of David's original entrance into the home and this one clearly offset or encapsulate the narrative of his 'being home' in between. We might be inclined to read the span of David's privileged presence in the house as a single chapter: within the diegesis, this is, on one level, David's phantasmatic terrain, the imaging/imagining of the protective family fiction around which the narrative turns and to which in the end it returns. Programmed as he is to unalterably love his mother, he cannot but reject symbolic castration, and thus embarks on an epic journey in search of his originary object of desire - only to return 'home', in the end, to the fantasy of the protective family fiction.[19]

The uncanny is inextricably bound to the developing tradition of the posthuman in that central characteristics from the posthuman, particularly human-like machines and the 'non-human' integrated into the human, have also been central concerns in identifying or defining the uncanny: uncanniness is encountered at locations of confusion concerning the animate and the animated. The three most characteristic manifestations of the uncanny in fiction are present in David. He is at once an automaton, a doppelganger and the dead returned. He can be read as both ghost and fantasy replacement of/for the dead child of Professor Hobby, as well as the ghost and fantasy replacement of/for Martin. In this regard he is a phantasmatic replacement child, a projection. The significance here is the movement from internal wish-fantasy (of professor Hobby's and of Monica's) to external materialization-phantom: "Some foreign thing projected out of the self."[20] In this

regard, we might also read HAL as an externalized fantasy: the dream of creating an infallible being, a perfect intellect with superhuman capacity. This 'dream' is often present in some capacity in narratives on artificial life and intelligence, from stories of immortality and cloning to superior intellect and chess-supercomputers. This movement from the internal or familiar, to the external or unfamiliar (or rather the familiar made foreign) is, as Freud makes thoroughly clear, already embodied in the German word '*unheimlich*'. *Heimlich* is an adjective meaning familiar, home-like, trusted, private, secret; while *unheimlich* is both the negative (unfamiliar, un-home-like) and a conflation or collapse of the negative and positive at an unclear boarder (also secret or private, but exposed to myself at a foreign – external – location).

In narratives on subjectivity, which both of these films are to a large extent, this type of structuring of the human self and *unheimlich* reflection has a long tradition, even outside of or prior to the science fiction genre. Within the genre and alongside questions newly posed by technological modernity, these portrayals of the uncanny become central as the rigidity of the boarders between what is human and what is not (cyborgs of all capacities, artificial intelligence, clones, the possibility of bioengineered organs and 'prosthetics', and so forth) become increasingly malleable and fluid. These mirrorings, doublings and externalizations are taken up in locations that point toward this malleability in order to give certain questions utterance. What kind of threat does this uncanny, non-human other pose? And what does this threat represent?

***Chop it Off*: Castrative Threat and Other Anxieties**

On a rather obvious level, the uncanny non-human other poses a threat to the distinction between human and non-human. This threat, in turn, is symptomatic of anxieties about the nature of subjectivity. If subjectivity is a construct, and is constructed via external agents, what does this say about the nature of my 'self'? How is *my self* different from the 'self' of the artificially intelligent machine? In this regard, what is at stake here is a threat to Enlightenment-based, liberal Humanist notions of the self, autonomous and in possession of a protected, constitutive, inner core. In fiction, and as we've seen in Freud's

reading of *Der Sandmann*, this threat is typically represented as a physical threat. But it is sometimes simply framed as a threat to symbolic status.

As noted above, the first element of threat in the narrative is when Martin returns home, which decidedly alters David's status within the family fiction. *A.I.* produces three subsequent scenes that explicitly frame *threat* to the human: the first, when Martin witnesses Monica take David's hand while he's being operated on; the next, when David, under Martin's advice, attempts to cut Monica's hair while she sleeps; and finally when David pulls Martin into the swimming pool. These are all written within the context of Oedipal anxieties of castration on various levels, accompanied by various framings of symbolic castration.

We begin with an initial threat to the biological son: after having provoked David into damaging himself (David mimics Martin, gobbling up mouthfuls of spinach at the dinner table), we are presented with a scene in which David's uncanny otherness is explicitly posed. As two technicians operate on David while he lies on a table with his mechanical innards exposed, Monica nervously looks on, holding his hand. David looks up at her and says, "it's okay mommy; it doesn't hurt." At this she gasps and falters, then quickly let's go of his hand and walks to a corner of the room, clearly disturbed. By underlining David's otherness, Monica's understanding of her feelings for him becomes destabilized, putting into question certain conditions in relation to their effect. The conditions of David's existence, that he is a machine, essentially, do not correlate to Monica's maternal feelings. At this point, Henry approaches Monica in an attempt to comfort her. "Monica," he says, to which she reacts, "shh. I just have to…" She doesn't complete the sentence, but rather produces an ellipsis, half turns her head, sighs and half smiles in a gesture indicating that she has now understood something she foolishly hadn't up till that point. The implication is that she understands the significance of her feelings and the symbolic relationship (between she and David) they are bound to; the following scene suggests that she has also understood the insignificance in trying to classify difference at an emotional level.

She walks back to David and securely takes up his hand again, as his mother, as Martin looks on. Martin rightly perceives this as a threat to his enjoyment of his mother. This is our first framing of castration, with the threat directed at Martin. Spielberg brings

this into focus by overlapping Martin's voice-track from the following scene onto the image of Martin looking at his mother affectionately grasp David's hand: “Will you do something special for me?” Martin asks David, and then we make the visual shift to the next scene, in which he tricks David into secretly entering the parents' bedroom and approaching the mother with a large pair of shears. He assumes that sending David into the bedroom with this object that is itself a potential threat, meant either to pierce or cut, will result in the actual castration of this object (the removal of the shears), which, as the object stands in metaphorically for a part of David that mustn’t enter the bedroom, would by extension be metonymous for the castration of the whole of David (would ultimately result in David’s physical removal from the home/parental bedroom).

Here is a second scene of threatening castration: Martin, himself threatened with castration, attempts to precipitate a limit to David’s access to the mother (or, in Lacanian terms, the mother being barred). He does this by means of the third castration: fooling David into a position in which he will appear as a castrative threat to the father and to the mother (an inversion of the normal conditions, under which the child's pleasure is curtailed by a symbolic father's castrative forbiddance). By entering the bedroom with the shears, and approaching the bed, we cannot but simultaneously read this gesture as a 'real' castrative threat to the father and subsequently penetrative threat to the mother. The sheers frame a real physical threat of violence, which we also read metaphorically. Thus, compositely, we witness castrative threat at the location of Martin, David, and to the parents. As if to drive home this element of castration anxiety, David is instructed to cut off a lock of the mother’s hair. Martin tells him to “sneak into mommy’s bedroom in the middle of the night and *chop it off*;” telling him that, as a result, she will love him more. Notably, the camera shot of the two sons is set against the backdrop of their bedroom wall, on which hangs a painting of a mother holding her child. Also worth noting is that, in the sentence that articulates the command “chop it off,” there is no antecedent to *it* (in fact the antecedent is found seven sentences and four ‘it’s earlier), leaving a certain suggestive ambiguity as to what should be lost here, or curtailed, and what gained.

Though Martin, by inference, equates the possession of a lock of hair to the tradition of chivalric romance, we know his intentions follow an other tradition: because this lock is not being proffered in a gesture of love or devotion (or at all, for that matter), but rather

taken in sleep, *chopped off*, we should read it in the tradition of castrative threat, examples of which we can find in various eras of mythology and literature - Samson and Delilah, *The Rape of the Lock* - and other narrative types such as dream/symbol analysis and psychoanalysis - the hair being another recognized symbol of vitality/potency/fertility.

In the scene following the bedroom incident, the threat enacted against the husband/father in the previous scene is made explicit through his reaction, and then we witness a physical threat toward the biological son. Discussing the event in the bedroom while preparing for Martin's birthday party, Henry is trying to convince Monica that they should get rid of David, claiming that he is a danger to the family. Monica on the other hand refers to David and Marin as brothers ("it's normal for brothers to challenge each other") and says of David, "he's practically human," to which Henry replies, "that's not how he looked holding the knife," meaning the shears, but clearly interpreting them in their penetratory capacity, which would suggests a threat to his symbolic status. Directly following this scene is the birthday party. With the children gathered by the poolside, one malicious boy is explaining David's operational system to the others. He stabs David in the arm to evoke a reaction (repeating Professor Hobby's gesture while giving a lecture at the film's opening), at which point David hides behind Martin, only to drag him into the pool and not let him go until the fathers jump in and release him. Consequently, Henry insists that David be returned to Cybertronics. Thus, this second son, this other son, is jettisoned from the family body, an act justified in the end through a real physical threat, but one we would also interpret as a threat presented to male subjectivity within this familial body, to the stability of these positions within the symbolic family network. As Julia Kristeva notes, it is that which "disturbs identity, system, order…[and] does not respect boarders, positions, rules" that causes abjection.[21] The abandonment scene in *A.I.* and the scene following it at the "flesh fair," which we might refer to as scenes staging abjection, constitute the melodramatic highpoint, and again a turning point, of this film.

The Abject Subject

> *Abjection works… as a means of separating out the human from the non-human and the fully constituted subject from the partially constituted subject.*[22]

At the "flesh fair," robots and automatons, particularly ones resembling humans, are dramatically slaughtered for human entertainment. They are shot from cannons through rings of fire, mutilated by bladed rotors and chainsaws, bound and splayed and torn limb from limb, and doused with acid or boiling oil as loud music plays in the background and lights flash, the frenzied crowd cheering along. These are grotesquely dramatic enactments of abjection where the non-human is separated from the human. Barbara Creed explains that robots and androids are portrayed as abject because they lack souls, and bodies without souls are equated to corpses, signifying "one of the most basic forms of pollution."[23] By staging what at first appears to be the abjection of abject material – or, by drawing on the idea of the abject – these films do not so much pose the question of 'are bodies without souls abject?' as they force us to consider what we think it is that constitutes a soul and how we perceive, as well as conceive, *humanness*.

When it is time for David to be slaughtered, the crowd revolts. The problem is that David resembles a real boy too exactly. Even though the crowd might know he's not human, the symbolic gesture in 'killing' him transgresses the bounds of the acceptable because of what he represents. In *Powers of Horror*, Julia Kristeva notes that "the abjection of Nazi crime reaches its apex when death, which, in any case, kills me, interferes with what, in my living universe, is supposed to save me from death: childhood, science, among other things."[24] Thus, there is a conflict or impasse of logics here. In order to maintain the boundaries of the human, we must separate the non-human where it threatens to compromise these boarders. On the other hand, David "looks so real" that the idea of killing him goes against our basic assumptions about life: we nurture youth, as opposed to extinguishing it. The impasse that is melodramatically played out in this scene, making explicit what is at stake in David's potential abjection, can be mapped back onto the abandonment scene that directly precedes it.

Monica takes David to a secluded spot in the forest on the pretext of having a picnic, and then, crying, tells him "you wont understand the reasons, but I have to leave you here." David resists, also crying and apologizing for everything he ever did wrong, and begs his mother not to leave him. Like the scene in which Bowman removes HAL's memory cards, this scene has often been described as the most disturbing throughout the

entire film. This is due, I would wager, to the ideological mechanisms at work here. They are the same as those in the flesh fair scene, only we are the dissenting audience. What is portrayed in this scene is precisely this equation of Kristeva's, where death interferes with what is "supposed to save me from death" - in this case, childhood. Although Monica does not literally kill David, she enacts a 'symbolic murder'. By abandoning him, she revokes the very organizing principal upon which he orders meaning in his 'life'. What constitutes the disturbing quality of this scene is that it is the mother, his primary interpellator and his originary object of desire, who 'kills' him. The more 'humane' thing to do would have been to return him to the Cybertronics Corporation and let them deprogram him as a machine, rather than 'uninterpellating' him, ideological and identity death, as her human child.

Nevertheless, this is just what the film dare not be too explicit about: death interfering with the child. And thus David is given some money and advice, and the narrative continues. The gesture is thus a turning away from the real horror of the logical consequences the abandonment scene gives rise to - little children are killed/abandon by their mothers out in the woods (another fairytale reference in this film - *Hanzel and Gretel*), which we might call an ultimate horror, or the apex of abjection - and turns rather toward another horror: the dream scenario of wish fulfillment that we recognize as the Oedipal narrative, though consummate. In the end, David is reunited with his mother, the father and rival brother are not to be found when David returns home, and David beds his blurry-eyed mother. Impossible; we know the kind of tumult this act consequently requires. Though before considering the closing scenes in *A.I.*, we should turn to the element of threat and the subsequent abjection in *2001*.

When HAL predicts that a communications unit will malfunction and there is some speculation as to whether he may have made a mistake, Dr. Bowman and Dr. Poole attempt to privately discuss what the consequences of a mistake on HAL's behalf might be. They go into a pod on the pretext of checking some equipment. After making sure HAL cannot hear them, they determine that any malfunction on HAL's part must result in his disconnection:

> Poole: "There isn't a single aspect of ship operations that isn't under his control. If he were proven to be malfunctioning I wouldn't see how we'd have any choice but disconnection.
>
> Bowman: It'd be a bit tricky. We'd have to cut his higher brain functions without disturbing the purely automatic and regulatory systems.
>
> Bowman: "You know another thing just occurred to me. As far as I know, no HAL9000 computer has ever been disconnected…I'm not so sure what he'd think about it."

After this exchange we immediately cut to HAL's eye, then to HAL's view of Bowman and Poole speaking. He's reading their lips. Then we cut to *2001*'s famous intermission, which, more than a pause for relaxation, should also be interpreted (in this regard, it's rather a pause for reflection). This 'ellipsis' takes the form of a diegetic break in the narrative at a critical, peripatetic moment. What has just been indicated? We might interpret this break in the narrative as signaling the moment when the non-human machine HAL makes an evolutionary step (as we know, the earlier scene dealing with evolution, when the ape-man discovers the tool/weapon, is also marked by a diegetic break).

In the span of this short dialogue between Dr. Poole and Dr. Bowman, a 'conspiracy' is established in that the humans here attempt to cut HAL out of the proverbial loop. Next, the threat of disconnection is determined and couched in language that alludes to HAL's animal 'biology': Bowman refers to HAL's brain and regulatory systems. Although regulatory systems must not be exclusively biological, they do refer to the evolution of fundamental physiological mechanisms in plants and animals. This biological and evolutionary allusion sets the stage for Bowman's implied suggestion that HAL might revolt, which in turn signals the possibility of HAL's possession of or evolvement of survival 'instincts'. Also, HAL's 'suspicion', signaled by his feat of lip-reading, is equally suggestive, if not merely of curiosity, of the possibility of his possessing survival instincts.

What loads this scene with significance is that with HAL's 'animality', with this potential for possessing survival instincts, we are witness to the decisive moment in the evolution of the machine (as we were with the ape-man and the bone/tool), or in the history of evolution in the context of the machine's relation to the human. Just as David's

possession of Oedipal desire is employed to indicate his 'evolutionary humanness', HAL's possession of survival instincts indicates a potential evolutionary turning point. Should the machine triumphantly defend itself here against the human, it would represent the machine as the 'fitter' being. At stake would be (by implication) the extinction of the human, or at least its subordination, under the superiority of the thinking machine. Fearing for his 'life', HAL triggers a series of events in an attempt at self-preservation. He attempts to kill the entire five-member crew, succeeding with all but one, and a struggle to the death ensues between Dr. Bowman and HAL. As Georg Seesslen suggests, "thus begins the struggle between man and machine, between two thought-systems [Denksystemen], that want nothing else but to survive one another."[25]

Here again we find structural similarity in the two films: there is a potential threat to the human, followed by the rejection or abjection of the non-human, which consequently exposes a human 'core' at the 'heart' of the non-human. In *A.I.*, after Monica has 'abjected' David, and he makes his journey in search of the Blue Fairy, hoping she can turn him into a real boy so that Monica will love him, the explicit exposure of David's Oedipal fantasy (the exposure of his 'core' human quality) is also marked by a diegetic break.

Having journeyed to Manhattan, which has been entirely flooded due to the melted polar caps, David goes to see Professor Hobby. After finding out that, not only can he not be made into a real boy, but also that he is not even one of a kind, David dejectedly throws himself from the Cybertronics building into the water, where, once he has sunken, he sees the Blue Fairy. Gigolo Joe, having watched David fall from the building, follows him in the "amphibicopter" they stole earlier to fly to Manhattan, and brings David back to the surface. As David is explaining that he found the Blue Fairy, Joe is detected by the police and taken away. David then proceeds to dive back down to the Blue Fairy, now with the amphibicopter. Having found her, a large Ferris Wheel falls on top of the amphibicopter and traps him where he is, facing what he believes is the Blue Fairy, who unsurprisingly resembles Monica. The viewer recognizes this, though, as a statue from the now submerged Coney Island amusement park. He sits there and prays to her to make him a real boy. Here, as with the prologue at beginning of the film, there is an intra-diegetic epilogue: "And David continued to pray to the Blue Fairy… He prayed as the ocean froze and the ice encased the caged amphibicopter and the Blue Fairy too, locking

them together… Eventually he never moved at all… Thus, two thousand years passed by."

At this point there is a prolepsis in which we jump forward two thousand years, when humans are extinct and New York is being excavated by some alien-looking beings we assume are an advanced form of the artificially intelligent machine (in fact, they resemble the Cybertronics corporate emblem), future ancestors of David's. When they find David, they offer to grant him any wish he has. As we can only anticipate, he wishes to be reunited with Monica. The AIs are willing to comply, but there is, of course, a catch: they can only reproduce a human specimen one time per specimen for a period of one day. David chooses to be with Monica for one more day, and this time when she dies, he will die with her. David and Monica spend an ideal day together at home alone. After he accompanies her to the bedroom at the end of this day, tucks her in, cries at her unequivocal declaration of love for him, he then gets into bed at her side, takes her hand, and we are told that "that was the everlasting moment he had been waiting for. And the moment had passed, for Monica was sound asleep – more than merely asleep. Should he shake her, she would never rouse. So David went to sleep too. And for the first time in his life, he went to that place where dreams are born."

Here, at the culmination of David's travels and his return home, we might interpret David as a prepubescent Odysseus: he must undertake this epic journey in order to return home to his 'object of desire' again. As such we find another 'intertextual' reference binding these two films: the epic tradition. Where David might be interpreted as a prepubescent Odysseus, when we take the title of Kubrick's film into consideration, the name *Bowman* immediately recalls Homer's Odysseus, the archetypal *bowman*. The question with *A.I.* is: what to do with this child at the end of his journey? With this prolepsis, we have the introduction of a post-epilogue genie-in-a-bottle-like wish fulfillment narrative, and finally a more decisive entrance into what is clearly an Oedipal fantasy.

Though the basis for *A.I.* - that should we replicate humans, we will have a certain responsibility toward these beings - would be the film's legitimate concern, where this narrative potentially becomes perverted is when it turns into a consummate Oedipal fantasy. The epilogue, though, opens up another possible way of reading the ending.

When David returns to the Cybertronics building in search of Professor Hobby, he encounters another Mecha just like himself. After the Mecha introduces itself also as David, David whispers, "You can't have her…She's mine. And I'm the only one." He then picks up a lamp, smashes the face of the other David, knocking his head off and across the room, and destroys the room, screaming "I'm David! I'm David!…You can't have her!" This scene of mirroring is an initial paraphrasing of what is at stake in *A.I.* On a practical level, David cannot come to terms with what he is: a robot. This very condition of David rejecting his non-humanness signals an ambiguity between the human and the non-human. On a representational level, he is not 'willing' to accept symbolic castration (he is not willing to give up Monica). This, in turn, raises the stakes, as his Oedipal love acts as a kind of *proof of humanness*. And if we haven't understood what is at stake until now, Professor Hobby enters the scene to offer another paraphrasing:

> Until you were born, robots didn't dream, robots didn't desire, unless we told them what to want…You found a fairy tale, and inspired by love, driven by desire, you set out on a journey to make her real and, most remarkable of all, no one taught you how… Our test was a simple one: Where would your self-motivated reasoning take you? To the logical conclusion that Blue Fairy is part of the great human flaw to wish for things that don't exist, or to the greatest single human gift: the ability to chase down our dreams?…

David's simple response to this is, "I thought I was one of a kind." When Professor Hobby tells him "[m]y son was one of a kind. You are the first of a kind," David echoes HAL's "[m]y mind is going" with, "[m]y brain is falling out."

After Professor Hobby has gone to fetch his colleagues, David goes outside to the edge of the building, utters "mommy" and plunges some fifteen-odd stories into the water (not unlike Hoffmann's Nathaniel, who leaps from the tower upon his final encounter with the 'evil' castrative father). This is the first visualization of David's death, and it is accompanied by other indicators suggesting that we might read the ten minutes surrounding this scene as a final death scene. First, there is David knocking 'his own' head off in the mirroring scene. Then, there is his echoing of HAL's "my mind is going." If we read this intertextually, we recall that this is the scene when the artificially intelligent machine dies. David then 'commits suicide' by jumping from the Cybertronics building. This is shortly followed by an epilogue, generally indicating the end of the play

or story (Spielberg repeatedly gives the viewer indications of this being a 'tale', or a fairy tale). Finally, in the epilogue, we are told that David "prayed" until he "never moved at all," which also seems to be another way to say that he 'died'. If we take these various indications of David's 'death' at face value, we might ask ourselves if it then makes sense to read the epilogue as indicating the proper ending, and the following segment, in which David is exhumed from the ice, as a false ending. To answer this, we can consider what is at stake in the final segment and how it is staged.

The Play's the Thing! Mise en abyme in *A.I.* and *2001*

As we know, a *mise en abyme* (a frame story, or a play within a play) is generally employed in the service of exposing or staging a specific knowledge. The 'point' of *A.I.*'s final segment is clearly to stage the reunion between Monica and David: at stake is a visualization of David's desire. A false ending would thus be employed to narrate David's fantasy of his reunion with his mother. The question remains as to how it is staged. There are a couple of elements that would support a reading of the reunion with Monica as strictly a fantasy (and whether we want to interpret this as a false ending or not, this *is* David's fantasy) and clearly as a *mise en abyme*, which in its own right automatically differentiates or splits the segment it stages off from the rest of the diegetic trajectory. When David is approaching the Blue Fairy with the amphibicopter, we get a close-up of a sign that says "once upon a time." In addition to suggesting that the entire filmic diegesis is a fairy tale, a modern Pinocchio, this shot also suggests that we are entering a fairy tale within the fairy tale: this is the entry point to David's fantasy. There are other elements suggesting the use of *mise en abyme* as a dramatic device here. First of all, there is an audience *within* the diegesis watching David's reunion with Monica: The AIs reconstruct the setting of David's home, based on his memories, and observe David as if through a screen from a location above the setting. Thus there is the element of the house being like a stage or a set (David: "Where am I? This looks like my house, but it is different"), and the day being specifically staged, not like the previous days they spent together, but rather an ideal day. As is generally the case with the *mise en abyme*, what is at stake here is the exposure (and at the same time, a concealing, as this is yet another 'staging'

presented to the viewer once removed) of a specific knowledge, as well as of desire.[26] In *A.I.* the exposure of desire is mimetic, and through it a specific knowledge is represented: David longs to be loved like a real boy, and the dependency upon this 'motherly love' (or in Lacanian terms, the *lack* at this location) is precisely the register within which he will bring order to his desire; the 'knowledge' represented here - for the inter-diegetic audience and by proxy the extra-diegetic audience - is the knowledge of what it means to be human. As the AIs state earlier, David had direct contact with the humans, and therefore he is an important source for learning about the humans; i.e. he is able to bring them a better understanding of what *the human* consists in (in this regard, it is particularly poignant that what the AIs witness is an enactment of the Oedipal fantasy).

In this case, the device of framing the reception of knowledge within and toward the end of the diegesis - by way of mimetically figuring David's desire - retroactively 'instructs' the extra-diegetic viewer how to process or interpret the knowledge he or she has received (assuming that the *mise en abyme* is not intended to misguide the viewer).

Yet another structural similarity, we equally have a *mise en abyme* in *2001*, in which Bowman acts as his own audience. This sequence ("Beyond Space and Time," untitled in the film) begins with a subjective shot of a predominantly white Neo-classicist/Victorian style room, viewed through the oval window of Bowman's pod; thus from Bowman's perspective. Framing this scene through an inter-diegetic 'lens' (the pod window) from the perspective of an observer within the narrative signals the very act of viewing itself: this segment is *about* viewing. Notably, this scene is prefaced by a close-up of an eye we assume to be Bowman's, shot in various colors. Moreover, for all the monitors and screens we see throughout the film, it is the first time we see a mirror, which Bowman stands in front of and looks at himself (there are various other elements throughout the film indicating the passive act of viewing: the name of the ape-man from the beginning of the narrative, Moon-Watcher, played by Daniel Richter, for example), also indicating an act of self-reflexive viewing. This self-referentiality not only signals that we are now witness to a *mise en abyme*, as the *mise en abyme* is self-reflexive insofar as it encapsulates the narrative, or a part thereof, it finds itself within; it also signals something about what we witness: the 'watching' here is explicitly framed as a passive act, and the 'action' that is framed tends in any case toward an element of passivity or complacency.

We should also note that what takes place in this scene is not so unlike what happens during the mission to Jupier: Bowman witnesses himself eating and sleeping in a white, sterile environment, again as if there is nothing meaningful for him to do. Thus there is an element of inaction in this scene, which Bowman 'doubles' in his passive viewing of himself.

There are various mimetic elements that appear in this segment, including the presence of the pod itself (which further suggests, along with the white sterility, a parallel between the apartment and the ship HAL was navigating). Again, to unravel this 'play within the play', we might ask what is at stake in this scene and how it is staged.

Bowman sees himself standing in the room wearing a space-suit; then he is looking at himself, aged, in the mirror; then he sees himself, aged again, feeding himself; then, after inadvertently breaking a glass, he sees himself, aged yet again, lying in bed. A very old man now, Bowman is lying in bed when the black monolith appears before him. He reaches out to touch it (with his index finger extended, the gesture mimics Michelangelo's Creation of Adam). This segment constitutes a *mise en abyme* specifically in the mimetic elements of watching (like Moon-Watcher, and, moreover, like HAL), eating (as we saw the ape-men do, as well as Dr. Haywood Floyd, played by William Sylvester, and as we saw Bowman and Poole do) and reaching out to touch the monolith (as, again, we saw the ape-men do, as well as Dr. Floyd). Each one of these elements is the focus of various scenes throughout the film.

Toward the end of this scene, Bowman is suddenly transformed into a fetus in a disembodied womb floating on the bed. Here, panning forward toward the monolith, there is a jump cut to a shot of the earth's moon, which pans down to a shot of the earth, and then the fetus and disembodied womb floating next to it in space with a similar size and shape, the dominant feature clearly the eyes. Here one might observe that a fetus also doesn't undertake any action, but, we can assume, is rather mostly concerned with being nourished. Following this line of logic, that the image of the fetus is also a mimetic device, we will begin to see all kinds of imagery throughout the film suggesting conception, the prenatal stage, birth, death, and rebirth. The life-cycle is also mirrored in the overall diegesis, beginning with the "Dawn of Man" (the first segment, birth), over the journey to the moon ('life', presumably - the central focus here is mobility, along with

the ever-present element of eating), onto the "Jupiter Mission" (in which all characters die, Bowman - whose odyssey this is - withholding), and ending with "Beyond the Infinite" (the final segment, rebirth, the Starchild). Considering this framing and reframing of the life-cycle, we might inquire as to where evolution (a 'meta-theme' in the film) fits in, and how it relates to the element of inaction or passivity we are repeatedly witness to.

The 'evolutionary' moments, particularly the ape-man's discovery of the tool and Bowman's defeating HAL, are initiated by an 'external' threat, against which the threatened party advances or evolves by defending itself (signaled by the sudden presence of the monolith). Initially, this happens through the discovery and implementation of the tool/weapon: using a bone, Moon-Watcher defeats his threatening adversaries and is able to supply food for his tribe, securing them a position of dominance among the animals. From this point on in the film, we know, the 'tool' plays a central role (from the bone to the pen, to the various space ships/shuttles/stations, to HAL, to the space suits and the pod), until it is precisely the tool that threatens to make the human obsolete. Notably, Bowman defeats HAL not with the use of any particular tool or with violence, but by outwitting him. Thus, that which enables Bowman to survive HAL/the machine is nothing external to himself, but rather his own sense and his will.[27] In this regard, it is not surprising that the next 'evolutionary' image we get of Bowman is of him (reborn) without tools, a naked fetus. The suggestion being that the next evolutionary step will invert the one we saw at the beginning of the film: it is not the external element that will give rise to survival and evolution, but the internal element - the mind, the will. It is in the form of framing the human's triumph over the very machines it had become dependant on (and which threatened human obsolescence) that *2001* gives utterance to essentialist anxieties; anxieties over the threatened, compromised or lost human 'core' that are so symptomatic of the postmodern/posthuman era.

Posthuman vs. Oedipal Anxiety

In an interview with Albert Borgmann, N. Katherine Hayles states: "Whereas the human has traditionally been associated with consciousness, rationality, free will, autonomous

agency, and the right of the subject to possess himself, the posthuman sees human behavior as the result of a number of … agents running their programs more or less independently of one another," and that, along with this, recent studies in cognitive science, artificial life, and artificial intelligence "have argued for a view of the human so different from that which emerged from the Enlightenment that it can appropriately be called 'posthuman.'"[28] What is often at stake in narratives such as *2001* and *A.I.* is an opposition between postmodern or posthuman notions of the *constructed* subject and the Enlightenment or liberal humanist notion of the self - where the subject is in possession "of a free and autonomous individuality that is unique…and that develops as part of our spontaneous encounter with the world."[29] As Nick Mansfield notes, from Nietzsche and Freud to Lacan and Foucault, and especially in postmodern and posthuman theory of the last thirty years, there is a widely shared consensus among theorists that "the subject is *constructed*, made within the world, not born into it already formed."[30] Thus, we might argue that the 'lost object' of postmodernism/the posthuman is the liberal humanist 'self'. In this sense, we can see how the rejection of the prosthesis, the tool, the 'external', non-human in *2001* might be symptomatic of postmodern/posthuman notions of the self as (in pejorative terms) 'compromised' by the external.

Many posthuman narratives both celebrate the posthuman and expose anxieties about the implications of the postmodern and the posthuman for the individual. We can see how this is true of *2001* and *A.I.*, as they both begin with a potentially utopian vision of technology, only to expose an essential threat to the human at the location of the technological: in *A.I.* differentiation is threatened; in *2001* physical life, or, rather, human autonomy is threatened. These are precisely the elements in question (differentiation, autonomy) in the cyborgian and posthuman era, where the boarders between the human and the non-human have become fluid. At stake, essentially, is a fear or rejection of the condition that "the boundaries of the human subject are constructed rather than given."[31] Thus we can see the logic in framing questions about identity and subjectivity through a juxtipositioning of the cyborgian or non-human vis-à-vis the human. Or, to put it another way, we can see the logical progression in which the cultural proliferation of the cyborgian leads to essentialist anxieties over identity and subjectivity. Though as Hayles argues in her discussion of what it means to *be* posthuman, "even a biologically unaltered

Homo Sapiens counts as posthuman," precisely because the "defining characteristics involve the *construction of subjectivity*," and not necessarily because of "the presence of non-biological components."[32] Or, as Slavoj Žižek suggests, this has long been implicit in psychoanalytical theory: "In short, one should claim that 'humanity' as such ALWAYS-ALREADY was 'posthuman' – therein resides the gist of Lacan's thesis that the symbolic order is a parasitical machine which intrudes into and supplements a human being as its artificial prosthesis."[33]

Thus, if we conclude that the threats posed by the machines in *2001* and *A.I.* act as a trope for the posthuman fear of a lost 'authentic' or essentialist core, then, we might say, they are symptomatic of a nostalgia for something that was never really there to begin with. Where posthuman narratives call up essentialist anxieties, they are drawing from the same well of nostalgia for the always already lost. Curiously, this is where *A.I.* departs from *2001*, and perhaps where it embodies the logical progression of Kubrick's work on the posthuman. *A.I.* moves from the essentialist anxiety at work in *2001*, which we also see at work in *A.I.* through the manner in which humans generally treat the Mechas, and from the *moral ambiguity* accompanying the 'killing' of HAL, towards a condition in which the *fact* of the AIs, that they are among us and not going away, must be confronted, and it takes up a position of moral responsibility to the 'artificial'. In this sense, *A.I.* has already integrated or digested the posthuman in the end, recognizing, as Monica does, the futility in differentiation based on the biological, and rather placing importance with the symbolic. In staging the Oedipal drama at the location of the non-human, *A.I.* is certainly pointing to a 'posthuman condition': not only do we live in a cyborgian age where we interact automatically with machines, having integrated them physically, conceptually, and symbolically - the machines have also integrated the human, making one indistinguishable from the other. But it does more than this: it depicts this condition as inevitable, and embraces it as such.

Notes

[1] Though there is some dispute concerning degrees of hybridity in relation to what might be considered 'cyborgian', there is general consensus that a cyborg is a hybridization of mechanic and organic; a cybernetic organism is "a mixture of technology and biology" (Chela Sandoval, from "New Sciences" in *The Cyborg Handbook*, ed. C.H. Gray). In a strict sense, then, David is an automaton. Though we can reverse Katherine Hayels's argument that simply by the 'extimate' nature of subjectivity, we are all cyborgs, and say that since the automaton David has so properly integrated human characteristics, he is also a cyborg.

[2] According to *The Making of* 2001: A Space Odyssey, Stephanie Schwam (ed.).

[3] Hayles, *How We Became Posthuman* 84.

[4] Zupančič paraphrasing Lacan, viii.

[5] Spielberg, *A.I.*

[6] Dr. Poole in an interview.

[7] Italics mine.

[8] Descartes 19.

[9] Take, for example, Ridley Scott's *Blade Runner* (based on the Philip K. Dick novel, *Do Androids Dream of Electric Sheep*), in which Pris, an android or 'replicant', directly quotes Descartes. Moreover, the main character's name, Deckard, is a homophone of the American pronunciation of 'Descartes'.

[10] 79

[11] 168: "…der Mensch selber ist ein maschinelles Wesen geworden…" This and all subsequent translations are my own.

[12] Phillips and Hill 139.

[13] Where he becomes moralistic is in his commentary on how we put our tools to use: for killing. The ape-men use bones to beat each other to death as well as to kill other animals. Similarly, when the shot of the bone-as-tool flying through the air shifts to a shot of a satellite flying through space, the implications are that the use of the tool has not changed drastically, as the satellite we initially see is a model of one that carries nuclear weapons.

[14] There is, of course, also more at work here. There is the suggestion that, while the computer is able to integrate human characteristics, the human must forgo the element of passion and emotion in order to evolve, and that this could effectively make the human obsolete, if not simply 'non-human'. Thus, the suggestion is that, along the chain of evolution, humans will be replaced by intelligent machines. This idea is also explicitly framed at the end of *A.I.* where an advanced form of David's future ancestors has evolved and humans are extinct.

[15] I take special note of this here, the first introduction of the cyborg (into a human environment), because this is what the cyborgs often do in these narratives: they return to kill. And if they do not literally return to kill, they always return to metaphorically kill by threatening the defining boarders of *human* and *non-human*. Additionally, as the cyborg in this narrative will hold the symbolic position of the son, and being that it is irrefutably a Oedipal narrative, the utterance is all the more suggestive: Oedipus is only able to become king and obtain Jocasta as a result of having killed his father, Laius. Thus David must do away with the father, which is in accord with the conditions of his fantasy (if we read the final scene as a fantasy) at the end of the film.

[16] Seesslen calls the scene in which Bowman disengages HAL's memory "one of the most horrific and moving scenes in film history." *Stanley Kubrick und seine Filme* 171.

[17] In both *Terminator* and *Blade Runner*, there is a play on the abject *I* and the abject *eye*. In Cameron's film, there is the scene where the Terminator stands at the sink in his hotel room, cuts away the flesh around the eye-socket and expels the artificial human-looking eye. In *Blade Runner*, though, the eye is present in various capacities throughout the film and always alludes to what it 'means' to be alive, what it is to be human, to be able to perceive the world(s) around you and, from the opposite end, the gaze of the eye is also a proof to the external world that you are alive. Here we have an explicit visualization of the proverbial 'window to the soul': The test designed to identify Replicants, the Voigt-Kampff test, is performed using an apparatus that also has a red camera eye, which looks into the eye of the test subject. It measures emotional response through dilation of the iris and pupil. There are various other framings of the

eye, including metaphoric ones such as the sun as eye. In its abject capacity, the eye appears in the scene illustrating its mass manufacture for the Tyrell Corporation. Disembodied eyes fill this scene. When questioning the eye engineer, one of the Replicants takes a handful of eyes and places them on the head and shoulders of the engineer. When the engineer realizes that his visitors are Replicants, he says to the Batty (Rutger Hauer) character, "you Nexus 6. I designed your eyes." To which Batty responds, "if only you could see what I've seen with your eyes." Aside from the cleverness of the response, it is also a commentary on artificial production and genuine experience (authenticity) at the location of the artificial. The irony of this scene is that the eye/I returns in the form of these two Replicants, to its place of manufacture to, once again, destroy its maker. Also, there is the scene of Tyrell's death in which, as I mentioned, Batty kills him by pushing in his eyes: another scene of abjection doubled by abject eyes. Frank Schnelle also points out that "In order to see better, Tyrell, Chew and the snake-maker Abdul Ben-Hanssan - all three designers of artificial life - wear monsterous glasses" ["Um (besser) sehen zu koennen, tragen Tyrell, Chew und der Schlangenmacher Abdul Ben-Hanssan - alle drei Designer kuenstlichen Lebens - monstroese Brillengestelle"]. *Ridley Scott's* Blade Runner 83.

[18] Freud, XII: 242. This and subsequent translations mine.

[19] We might also read this bookended story within the story as the phantasmatic space/narrative of the biological family (particularly of Martin) in the film as well: the child in the coma is representative of a shift to phantasmatic space, in which the suspended child veils castration while traversing the fantasy of wholeness, played out with a representative stand-in, David, only to awake from the fantasy in a brutally altered state, physically debilitated - he emerges from the fantasy properly castrated, which is symbolized in the film by his crippled condition. However we choose to read this scene, we know we are due for a dramatic shift in the course of events and the locations within symbolic relations.

[20] Freud, XII: 248.

[21] 232.

[22] Creed 8.

[23] 10.

[24] 232.

[25] *Stanley Kubrick und seine Filme* 171.

[26] As in as *The Murder of Gonzago* from *Hamlet*: the 'secret' knowledge of Claudius's deed is mimetically exposed, and at the same time Hamlet's latent fantasy of killing the king, and thus vacating the position he might enter into, is represented.

[27] Here (with the will) we might draw a thematic loop back to Nietzsche's '*Uebermensch*' (super-man or higher being), which is present in the narrative via Richard Strauss's musical interpretation of *Also Sprach Zarathustra*.

[28] http://www.press.uchicago.edu/Misc/Chicago/borghayl.html

[29] Mansfield 13.

[30] 11.

[31] Hayles, *How We Became Posthuman* 84.

[32] *How We Became Posthuman* 4. My italics.

[33] *On Belief* 44.

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