## Duncan Jones' Moon: Do clones dream of uncopyrighted sheep?

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In Moon, the blurring limits between natural and artificial beings are depicted by pointing out tensions and complementarities experienced by the main characters: Gerty, a robot, and Sam Bell, a clone. The cyborg issue underlies the issue of technologically manipulated biological organisms designed for labour exploitation. Moon thus articulates two urgent debates in contemporary societies: the use of the bioengineering in advanced capitalism and the role played by an ever-growing undocumented and criminalised labour force.



**Moon** (Duncan Jones, 2009) quietly and silently bursts into a sci-fi dominated by F/X and the thrilling action by means of a visual treatment that prevents spectacular computer generated images from stepping up the narrative pulse. On the contrary, the film is based on a crafty

man-made aesthetic that send the spectator back to the classics of science fiction. However, some of the main topics are also typical to late science fiction, especially cyberpunk, by the role played by corporations on the exploitation of men (or of beings that are in the dim limits of humane) through technology.

In **Moon** Earth's future is not apocalyptic but luminous, a new source of energy has solved all the pressing problems of late industrial society. In that close and tranquilising future, Sam Bell (Sam Rockwell) is finishing his contract as the sole base employee in Sarang, Lunar Industries' mining base located in the dark side of the moon. The character's loneliness, the slow movements in space without atmosphere and the spotless white settings of the base suggest a **2001: Space Odyssey** dejá vu. The presence of Gerty, the computerised assistant programme of the base that manifests itself as a robotic arm and that runs the base reminds HAL 9000's ominous presence in the Discovery One ship from 2001. The surprise in **Moon** rests on its divergence: in spite of all the expectations aroused in the spectator by some movements the robot arm makes behind Sam, the machine never rebels against its apparent master. Nevertheless the rebellion of the machine occurs: Gerty loyally assists and, as it will be discussed later, sympathises with Sam, taking advantage of a contradiction on his programme as a justification to help him, thus taking a decision that brings the machine closer to a living being or, at least, an autonomic artificial intelligence.

## I. Technical Beings: artificial intelligences and clones

Gerty (Kevin Spacey), the AI that runs the base (and that is part of it), is a character that appears on screen though its input and

output devices: the optic device which allows him to perceive, the mechanical arms that enable it to act on the inside of the base, the screen that displays its feelings, the speakers through which it is heard speaking. Unlike his robotic predecessors such as Hal-9000 or the Terminator, we never see from Gerty's perspective. Its electronic perception of reality is hidden for us and we can only get a hint of its thoughts through the variations of the emoticons displayed on its screen and the scarce variations of its monochord voice. Gerty is, in the end, a software programme that administers the several devices that keep the base operational, amongst them the worker who turns out to be a mere gear of Sarang's machinery. The limits of the programme, however, will be put into question during the film.

Sam, the worker, is actually a clone that discovers his condition due to an accident unforeseen by the base system. The cyborg as a concept is not evident in Moon, at least if we stick to the most extended visual representation of it, as a combination of mechanical and biological parts as it appears in *Robocop* or the presentation of 21st century Japan portrayed in **Ghost in the Shell** films and animés or in **Parasite Dolls**. In this case the underlying concept of cyborg is closer to **Blade Runner**'s replicants, that is, a technically manipulated biological organism; or as Haraway defined it: "a cybernetic organism, a hybrid of machine and organism, a creature of social reality as well as a creature of fiction" (Haraway, 1991: 149). The cyborg is therefore a general concept that includes, among others, clones, replicants and mutants. Clones in **Moon** also have a due date which can be seen in the sudden deterioration when they get close to their three years contract, as Sam finds out in previous clones' videologs. The film is not clear on whether this due date is planned on the gene fabrication or is a product of the working conditions on the dark side of the moon (for instance, radiation), but it unequivocally suggests a situation of labour exploitation where the working force is easily replaceable.

Sam is a product of biotechnology, a sophisticated tool property of Lunar Industries, a result of genetic manipulation that allows the production of identical technical individuals from one specific individual utilising asexual reproduction techniques. And Gerty is a product of robotic engineering that allows articulating mechanics, cybernetics and electronics. Gerty and Sam represent two directions in the development of science: on one hand, robotisation, a mechanical-computational system that runs the base and controls Sam's life; on the other, the innovation of bioengineering, the human clone.

The videoconference between Lunar's directors (Thompson and Overmeyers) and Gerty makes evident the hierarchy of the robot over the clone. This also evokes other sci-fi classics such as **Alien**'s android Ash who had its own secret agenda: taking the alien life form

back for the benefit of the corporation in spite of the hazards implicated for the crew of the Nostromo. The videoconference clearly pictures the capitalist logic of pursuit of profit that guides the actions of Lunar Industries. In the list of losses, the worker is at the bottom: after the rover and the harvester:

Gerty: The new Sam is in reworking order. But we only have two working harvesters now.

Overmeyers: Yeah, well, what a surprise!

Thompson: Gerty, we're going to have to find a way to ramp up production.

Gerty: I know.

Overmeyers: This is incredible! But how do you manage to destroy... a fucking rover, a harvester and an employee all on the same day?

Gerty has a programme that allows it to know everything that happens inside the base and control all of Sam's indicators: daily routine, alimentation, moods. Sam, on the other hand, has been implanted the memory of the "true Sam". The implanted memories and the administration of brief communications with his wife evoke not only**Blade Runner**'s replicant character Rachel but also the manipulation and creation of a fictional life for corporative profit in **The Truman Show**. Thus, Sam's family history is nothing more than a human resources department strategy to keep the worker on edge: marriage undergoing problems, birth of daughter (ellipsis), wife waiting for him, wife abandoning him, wife that decides to take him back.

In spite of possessing human features and memory, Sam is objectified in a double sense. First, as a body that can be disposed of and replaced, and second, his life is considered infinite, a permanently turning wheel that eventually reaches back its starting point. Moon introduces the ambiguity produced by biotechnology between an infinite life and replaceable bodies. A life exclusively destined for production and bodies with a due date that can be easily replaced due to cloning technology that, as we will discuss below, make the capitalist dream of production without labour force come true. The body produced by bioengineering is a body preceded by data (its implanted memory) that avoid training costs: Sam has a past and the illusion works as a corporate strategy to maximise the utility of each of the cloned bodies. Clones are thus means of production, machinery, rather that labour force.

Sam's hobbies are, in fact, a part of a management strategy for maximising the investment in the clone. However, each Sam

leaves behind a mark of the passage of time in the base: the growth of the model break up the circular, ever resetting, existence of the clones. It is precisely his role as a demiurge of his model hometown what allows Sam 5 and 6 to discover their conditions as a part of series of clones. This becomes evident in the unforeseen meeting between the two Sams which occurs when Sam 5 crashes a moon rover against a harvester, Gerty assumes he is dead and decides to wake up Sam 6. This Sam, in turn, stirred by a conversation between Gerty, Overmeyers and Thompson he overhears, challenges Gerty and goes to check the accident in the harvester only to find Sam 5 wounded in the rover. After some initial tension between both characters, the model of Fairfield town allows them to discover the memories they share between them and with the preceding Sams.

Sam 6: How long did it take you to do that?

Sam 5: Oh, I don't remember doing all of it. I remember doing the church... and the Salvation Army. And doing the people.

My mind has been acting kind of weird lately.

Sam 6: That's Fairfield, right? There's the town hall.

Sam 5: Fairfield, that's right...

Sam 6: Yeah, that's Tess... and Eve...

Sam 5: You... You know Tess?

Sam 6: Yeah, I know Tess.

Sam 5: You know about Eve, right?

Sam 6: What?

Sam 5: I had a...We had a girl... Eve. Ain't she beautiful? She's my little monkey. She's our little monkey.

This shared memory is also presented by the memories of their wife and her pregnancy. The ambiguity of the plural first person ("we had") and the possessive pronoun ("our") suggests that she is Sam 5 and Tess' daughter but also that she is both Sams' daughter, although Sam 6 has not received those news according to the plot devised by Lunar Industries management to keep up the tension of the clones, generating an uneasiness that Sam 6 is not willing to accept. On the other hand, there are other subtle insinuations that point out Sam as a clone before it becomes evident, such as Gerty's comment "You don't seem like yourself today", the clock's alarm song that goes on with Chesney Hawkes' song "The One and Only" or his T-shirt stamped "Wake me up".

The accident resulting in the coexistence of the clones is what enables Gerty's decision, a very subtle rebellion of the machine against its human masters, Lunar Industries. By sticking to the programme that states that it must keep Sam safe, Gerty privileges one directive over another. If it declared that two clones are awake they would be both exterminated since that would endanger the clone exploitation system and therefore it "decides" to give priority to the directive that states it must keep Sam safe (which applies to both Sam 5 and Sam 6). Taking advantage of the limitations of its programme, Gerty allows itself to choose and does not inform Lunar Industries that Sam 5 was recovered alive, since that would imply a danger for the clone. This will be discussed further below.

The decision is confirmed when Gerty provides Sam 5 the password of his contract, which allows him to see the logs of the previous clones. In this scene, the approaching of Gerty's mechanical hand from behind Sam 5 insinuates a long tradition of machines going against men, but here there is a slight change, the artificial intelligence helps the clone. Such a decision results in the clones discovering what their true fate will be once they end their three year contract: instead of being sent to earth, the clones, very deteriorated by that time (we cannot know if this is due to some genetic manipulation, limitations of the cloning process or the working conditions on the moon) are deceitfully cremated.

Clones in the Sarang base can also be seen from the Vilem Flusser (2000) perspective of the "operator-apparatus complex" which defines industrial capitalism and in which the operator does nothing more than actualising the possibilities programmed in the apparatus. Not only are the clones nothing more than "products", images reproducible from a DNA strain (as Gerty lets Sam 5 know: "Genetic abnormalities and minor duplication errors in the DNA... can have considerable impact on..."), they are also mere operators of the base, a black box itself that they do not fully understand.

Taking on from Flusser's thought, the Sarang base can be thought as a "black box", an apparatus whose programme foresees all its possibilities. The only thing the clones do is to actualise the game of permutations of the discrete concepts foreseen by the programme before the continuous of the real. It is only by opening it up that the operator can gain liberty and autonomy, by discovering and understanding its functioning and programmes. By discovering the clone deposit (which is, as Gerty stresses, "out-of-bounds to awakened clones"), and taking advantage of Gerty's programme ("Keep Sam safe"), Sam 5 and 6 manage a way out of the system restraints, and open a possibility for Sam 6 to survive the three year span of the contact.

The reasoning derived from the directive "Keep Sam safe", pushes Gerty to make another decision, to sacrifice its memory in

order to preserve Sam 6's life. This can be seen as an opening to freedom, which transforms him from mere machinery for production into an individual with autonomy.

Gerty: Sam, this is not going to work.

Sam 6: Why?

Gerty: I have recorded everything that has taken place since your awakening. If anyone were to check my memory cache, it would put you in considerable danger.

Gerty: You could erase my memory banks. I could reboot myself once you have departed.

Sam 6: Are you okay with that?

Gerty: I'm here to keep you safe, Sam. I want to help you.

The relation between memory and freedom to act articulates one of the most important dialogues in which both the clone and the artificial intelligence, technical beings, are made equivalent with "people", which is not programmed.

Sam 6: I set your...I set your computer to reboot... the moment that I launch.

Gerty: I understand, Sam.

Sam 6: You should be OK.

Gerty: I hope life on Earth is everything you remember it to be.

Sam 6: Thanks, Gerty. Are you going to be OK?

Gerty: Of course. The new Sam and I will be back to our programming as soon as I have finished rebooting.

Sam 6: Gerty, we're not programmed. We're people. Understand?

Memory is thus the only proof of individuality of these beings, the proof that these beings are not serial products, spare parts, capital goods of Lunar Industries. Gerty decides to sacrifice its own so that Sam 6 can get to know something in reality he only knows artificially, as an implanted memory.

This mutual help relationship (between Sam 5 and Sam 6 and between them and Gerty) takes the idea of a "political fictional (political scientific)", developed by Haraway (1991: 151) through her concept of cyborg, to an extreme. From this perspective, all the delimitations that sustain dichotomous thinking are put into

questioning; especially the boundary between animal and human and between organisms and machines. Moon suggests that eventually there would be no clear boundaries between humans and machines. And this would be because neither language, nor the ability to use tools, nor social behaviour nor mind states helps distinguishing a man from a machine. Sam 5, Sam 6 and Gerty talk, use tools, are sensitive to each other's feelings (when Sam 5 gets sad once he acknowledges he is a clone, Gerty perceives it and manifests it with an emoticon on its screen). These manifestations of "humanity" exhibited throughout the film get to a conclusion when Sam 6, before leaving for Earth, says to Gerty that "We are all people". This is the core of the main issue of the film which could be defined as the "humanity of post-humans".

The technological development resulting from biotechnology, bioengineering and bioinformatics research set the basis for the posthumanist discourse according to which technology will transform the concept of human, in a way in which technology is an active part of biological evolution, to the point of dispensing with its organic elements. This has been called trans-humanism. This point of view states that the attributes that traditionally defined the humanity of an organic body, the facts of "being human", are now challenged. As we discussed before, such attributes (language, technology, emotivity, and sociability) are also to be found in the clones and in the artificial intelligence. And, on the contrary, men appear dehumanised: the managers of Lunar Industries, in their lust for profit, deceit the clones making them believe in their humanity, but show no concern for them other than the economic cost of the loss of a clone in the accident outside the base. The clones are considered just another replaceable part in the system of the Sarang Moon Base.

## II. The dark side of capitalism

**Moon** articulates three topics of contemporary society: control over life (human and not human), space colonization and capitalist development on the basis of sustainable energy resources. The energy of the Sun, trapped in the rocks of the dark side of the Moon is harvested by Lunar Industries which becomes the supplier of 70% of Earth's energy. This warrants the continuity of capitalism. This is made possible by a model of space conquest driven by political and economic interests since capitalism sustainability was impossible based solely on Earth resources.

The clock, the undisputable symbol of industry is an ever present marker of time in the film. Even in the dark side of the Moon, where there is no difference between night and day, Sam is bound to work time. The concern for the conclusion of the three years contract and the return home is, in fact, the key complication in the film. Sam

counts the remaining days to come back to Earth and speaks out his wish to return, as the clones before him. This shows that it is still possible to establish a difference between the place of work and the place of life, that is, home which agrees to what Michel Foucault (1995) has defined as "disciplinarian society". But what becomes also evident is the constant subtraction of Sam's life in the base; a life devoted to production that also integrates his recreational moments (music, television, modelling, ping-pong, and exercising) in order to maintain productivity. Sam's time in an aseptic white space where the limits of the different rooms of the base are not clearly distinguished portrays the new configuration of the "society of control" of advanced capitalism described by Gilles Deleuze (1992). Sam's time is controlled by Gerty (this is made clear when it points out to Sam that he spent nine hundred thirty eight hours working on the model). Time, measured by a digital clock with no interstices, is a homogenous time.

The location of the base and the contrasts with the corporative advertising which opens the film allows us to discover the dark side of the paradise of unlimited consumerism which Earth has turned into. Thus the nature versus culture antagonism is left behind by means of a virtuous multicultural and Eden-like resolution enabled by corporate capitalism through the extraction of the natural resources in the dark side of the Moon, that is unseen, and that is extracted with slave labour carried out by the exploitation of precarious beings. However, the allegory is not obvious (the worker is a middle aged white American performing a seemingly hard yet very well paid task) until he discovers his condition of technical being and property of Lunar Industries. This reinforces and universalises the sense of the decay of labour rights, wage moderation, job insecurity and precariousness of the working class in the context of advanced capitalism.

The white and aseptic spaces suggest the shinny future imagined by classic science fiction but also contemporary work spaces in which casual clothing, family pictures and personal decoration touches are encouraged as a human resources department strategy to keep the clone (and one could add, the contemporary worker) under the illusion of humanity necessary for the proper development of the company's business plan. However, memories are "edited" and "uploaded", transforming the clone into a recipient of predetermined contents that will ensure its working, almost as if they were software. This situation puts Sam in a diametrically opposed situation to Neo's "I know kung fu" scene in **Matrix**. In this last case, the cyborg condition enables him to incorporate knowledge and skills according to his immediate needs, making technology an extension of human possibilities. The clones in **Moon** are themselves the extension of a technical device, the base. Clones are, in fact, spare parts of a very complex gear assembly as the disillusioned Sam 6 says to Sam 5 who insists on holding to the illusion of returning home after finishing the contract:

Sam 6: Look, it's a company, right? They have investors, they have shareholders. Shit like that. What's cheaper? Spending time and money training new personnel... Or you just have a couple of spares here to do the job? It's the far side of the moon! Those cheap fucks haven't even fixed the communication satellite yet! (...) You really think they give a shit about us? They're laughing all the way to the bank!

The luminous future created by Lunar Industries is maintained by the concealment of a productive world based on the exploitation of disposable workers that have been turned into spares, just one more of the corporate assets, clone workers that cannot build a career since they are held by contract, alone and with no possibilities of unionisation. And, when this situation finally becomes public with the arrival of Sam 6 to the Earth, clones are presented as criminals, madmen or illegal aliens.

- -...Stocks have slipped a further 32% after accusations that...
- ..Sam Bell for crimes...
- ...Lunar el segundo...
- -...Clone six, the clone of Sam Bell has been giving evidence that CEA's board of directors meeting in Seattle...
- -You know what? He's one of two things: He's a wacko or an illegal immigrant. Either way, they need to lock him up! Line two!

Ten years ago, Slavoj Zizek offered an interesting interpretation of the 9/11 attacks using **Matrix** as an allegory. In 2001 Zizek stated that the existence of the first world bubble was made possible by the blurring of labour, the construction of a menacing Other, and its off limits exploitation. **Moon** takes Zizek's allegory to its ultimate consequences. The Other that allows an Eden like life on Earth is absolutely invisible, hidden on the dark side of the Moon, away from the eyes of society, and when he reaches Earth is treated as an illegal alien, surprisingly turning the clone of a male white American into an allegoric figure of all the impoverished migrant workers that illegally crosses the borders of the first world. This is rendered evident on how Sam 6 reaches Earth: as a stowaway, just like **Blade Runner**'s Nexus-6, only to be criminalised. This ending also might be thought under the concept of "crimmigrant" that has spread over the last years in the media and first world countries foreign policies to

denominate irregular immigrants. Such concept implies a convergence between immigration and criminality, calling for the application of more severe migration laws and differential punishing due to the migrant condition (Stumpf, 2006). In this way, democratic states combine population regulation and control (the biopolitic paradigm) with the sovereign right of exclusion of "undesirable" foreigners. The ending of **Moon**portrays in a futuristic setting, on the skin of technical beings, an allegory of one of the main social issues today, the criminalisation of immigration and the construction of its social rejection, along with its exploitation as cheap labour deprived of working rights. Thus, cyborgs become illegal immigrants, mere spare parts of capitalist production.

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