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## Ableism and Futuristic Technology: The Enhancement of ‘No Body’ in the Films *Lucy* and *Her*<sup>1</sup>

### Abstract:

Implementing a disability studies and cultural studies framework, this paper offers a critical analysis of the two popular science fiction films: *Lucy* (Besson, 2014) and *Her* (Jonze, 2013). In both films, Scarlett Johansson plays the leading female character. In *Lucy*, the protagonist is a human being who experiences radical transformation due to an overdose of a new kind of drug, while in *Her*, Samantha is an operating system designed to evolve. Despite their clear differences, Lucy and Samantha share a similar destiny. Eventually, both of these figures develop into a super-able consciousness that continues to evolve beyond the restrictions of the physical world.

I argue that the two films reflect what Gregor Wolbring termed as “the transhumanized version of ableism”. Transhumanism is a contemporary social movement that calls for a future in which biological boundaries are overcome. From a transhumanist perspective, all human bodies—impaired or able-bodied alike—are inferior, deficient and ultimately disabled. As such, they all need to be ‘cured.’ Thus, the transhumanist solution becomes not the enhancement of the body, but rather the creation of an independent enhanced mind. *Lucy*’s and *Her*’s representations of an advanced mind with no body are aligned with this futuristic aspiration. Both offer the viewers a first glance at a potential future in which technology enables consciousness to prosper without a body.

At the end of both films, the body is envisioned as an unnecessary barrier—as an obstacle to reaching a more advanced state of being. This dismissive portrayal of the body is achieved by the well-known trope of cure. Following the enhancement of her mind, Lucy’s body begins to deform and disintegrate to the point that she almost dies.

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By absorbing more doses of the drug, her mind succeeds in overcoming her body and eventually Lucy is 'cured' from its restrictions. On the other hand, Samantha cannot be considered a real human being. This 'disabling' state is resolved by her ongoing growth and change of attitude. Finally, Samantha is 'cured' and proved superior to flesh and blood human beings. These 'ultra-cure' narratives are recognized by me to be part of a fundamental long-lasting ableist western ideology and an integral part of the Eugenic doctrine.

**Key words:** ableism, transhumanism, enhancement, science fiction, cure, complex embodiment, eugenics

## Introduction: The Transhumanist's Disability Metaphor

At first glance, disability is nowhere to be found in the two popular science fiction (SF) films: *Lucy*<sup>2</sup> and *Her*<sup>3</sup>. However, watching these films more carefully, the viewer may start to realize that some version of disability representation does appear in each film. During each of these films, there are specific scenes that portray the leading female characters, both of which are played by Scarlett Johansson, as disabled because of her unique relation towards the body. In *Lucy*, a 2014 film written and directed by Luc Besson, Lucy succeeds in "colonizing" her own brain after absorbing a significant amount of a new drug. However, due to the process by which her mind is enhanced, Lucy's body begins to deform and disintegrate. Undergoing a near-death experience, there is a (temporary) recognition of her total dependency on her body. On the other hand, in *Her*, a 2013 film written, directed, and produced by Spike Jonze, Samantha fantasizes that she has a body. Because she is an operating system (OS) who "lives in a computer", she sees herself as "somehow inferior" to flesh and blood human beings. Although these two different relationships with the human body contrast each other, these scenes shape both female protagonists as disabled characters.

The disability studies scholars David Mitchell and Sharon Snyder scrutinize the representation of disability in literature and cinema. They argue that disability frequently serves as a powerful metaphor to explain something else. They coined the term "narrative prosthesis" to describe this widespread phenomenon<sup>4</sup>. I argue that the portrayals of the leading female characters in *Lucy* and *Her* fit this pattern. Furthermore, I claim that despite the differences between the movies, in both of the films, the human

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<sup>2</sup> *Lucy* (2014, Luc Besson)

<sup>3</sup> *Her* (2013, Spike Jonze)

<sup>4</sup> David T. Mitchell and Sharon L. Snyder, *Narrative Prosthesis: Disability and the Dependencies of Discourse*, (Ann Arbor: The University of Michigan Press) (2001).

body is constructed as an unnecessary barrier via this metaphor of disability and cure narrative. Essentially, I argue that the films reflect what Gregor Wolbring, a bioethicist and ability studies scholar, termed as “the transhumanized version of ableism”<sup>5</sup>.

Transhumanism is a contemporary social movement that calls for a future in which humanity has evolved to such an extent that biological boundaries are defeated. Wolbring explains that transhumanism “perceives human bodies as limited, defective, in need of constant improvement”<sup>6</sup>. Fiona Kumari Campbell, a disability studies scholar who researches ableism and technology, adds, “since normalcy is under [transhumanism’s] logic quashed and the pathological is expanded, ALL human bodies are defective!”<sup>7</sup> This means that from a transhumanist perception, all human bodies—impaired or able-bodied alike—are inferior, deficient and ultimately disabled. As such, they all need to be improved and ‘cured.’

This transhumanist metaphor of the body as a disability appears in both films. Indeed, in his book *Transhumanism: The History of a Dangerous Idea*, David Livingstone explicitly points at *Lucy* and *Her* as two of Hollywood’s examples of transhumanism<sup>8</sup>. Based on the ingrained cultural imagery of disability as a problem in urgent need of a solution, the films represent the human body as a barrier to the enhanced mind. In the case of *Lucy*, the solution for her corporeal disabling state is a transformation to an enhanced mind with ‘no body’. The case of *Samantha* is essentially different since she does not have a body to begin with. However, this opposite ‘disabling’ state of a mind without a body is resolved in the end by her ongoing growth and change of attitude. Throughout the film, while she continues to evolve, *Samantha* embraces her situation as a valuable state of being in its own right and acknowledges her advantages. Eventually, *Lucy* and *Samantha* are both represented similarly as a super advanced mind that exists without a body.

Since the two films belong to the genre of SF, they present an image of a possible future. Alison Kafer, a feminist and queer disability studies scholar, explains that the desire for “a disability-free future”<sup>9</sup> is profound in Western cultures and seen as self-evident. *Lucy* and *Her* seem to fit this dominant ideology but shape a new representation of a futurity without disability. They offer the viewers a first glance at a potential future in which technology enables consciousness to prosper without a body.

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<sup>5</sup> Gregor Wolbring, “Why NBIC? Why Human Performance Enhancement?”, *Innovation: The European Journal of Social Science Research* 21:1 (2008), p. 30.

<sup>6</sup> Gregor Wolbring, p. 32.

<sup>7</sup> Fiona Kumari Campbell, *Contours of Ableism: The Production of Disability and Abledness*, (New York: Palgrave Macmillan) (2009), p. 74.

<sup>8</sup> David Livingstone, *Transhumanism: The History of a Dangerous Idea*, (USA: Sabilillah Publications) (2015), p. 6.

<sup>9</sup> Alison Kafer, *Feminist Queer Crip*, (Bloomington: Indiana University Press) (2013), p. 3.

## Curing: The Emergence of an Ultra-Cure Narrative

Both *Lucy* and *Her* play out the well-known trope of cure. This common portrayal of disability in television and cinema was identified by the disability studies historian, Paul Longmore, in his canonical essay "Screening Stereotypes"<sup>10</sup>. Mitchell and Snyder explain that according to Longmore the prevalent depiction of disability in mainstream media is as a problem needing to be solved by a "kill-or-cure plotline"<sup>11</sup>.

Kathryn Allan, who edited the anthology *Disability in Science Fiction: Representations of Technology as Cure*, contributes to this discussion by stressing that technology is typically used in SF as the means to cure the disabled body<sup>12</sup>.

Of course, the perfect body is an illusion that no one is capable of maintaining (as all bodies inevitably become ill and die at some point). Nevertheless, the idea of curing the body of its infirmities is a powerful trope repeated throughout the entire history of the SF genre<sup>13</sup>.

This long tradition of 'technological curing' in SF is clearly applicable to *Lucy* and to some extent also to *Her*. Nevertheless, I recognize in them a significant shift from the conventional futuristic narrative to which Allan points. While the SF texts she refers to are limited to "the idea of curing the body", the films I analyse abandon this idea. Instead, they offer a possibility of curing the mind *from* the body. As Brent Walter Cline argues, in post-human SF literature texts "The body is only an obstacle"<sup>14</sup> that is cured through "the divorce of consciousness from the physical body"<sup>15</sup>. He adds that

The human body, here always cast as a disabled body, must be eliminated so that the outcome of the story—the progression of human evolution—can occur. [...] These bodies-as-barriers [...] serve as a metaphorical signifier for the denial of access to the next step in human evolution<sup>16</sup>.

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<sup>10</sup> Paul K. Longmore, *Why I Burned My Book and Other Essays on Disability*, (Philadelphia: Temple University Press) (2003), pp. 131-148.

<sup>11</sup> David Mitchell and Sharon Snyder, "Narrative", in *Keywords for Disability Studies*, ed. Rachel Adams, Benjamin Reiss and David Serlin (New York: NYU Press, 2015), p. 127.

<sup>12</sup> Kathryn Allan, "Introduction: Reading Disability in Science Fiction", in *Disability in Science Fiction: Representations of Technology as Cure*, ed. Kathryn Allan (New York: Palgrave Macmillan, 2013), pp. 1-15.

<sup>13</sup> Kathryn Allan, p. 9.

<sup>14</sup> Brent Walter Cline, "'Great Clumsy Dinosaurs': The Disabled Body and the Posthuman", in *Disability in Science Fiction: Representations of Technology as Cure*, ed. Kathryn Allan (New York: Palgrave Macmillan, 2013), p. 133.

<sup>15</sup> Brent Walter Cline, p. 131.

<sup>16</sup> Brent Walter Cline, p. 133.

This futuristic representation of the body as a barrier echoes the intuitive assumption made above by Allan. However, in contrast with Allan's more respectful approach to the inevitably imperfect body, post-human—or rather trans-human—SF literature is unwilling to accept this as a fact of life. It seems that the alternative approach of transhumanism contains a more ambitious aspiration to perfect humanity by separating it from the essentially 'disabled' body. I suggest conceptualizing this transhumanist script as an 'ultra-cure' narrative. I identify this narrative in both *Lucy* and *Her* and recognize in them each two distinct versions of this ultra-cure narrative.

In *Lucy*, the ultra-cure narrative unfolds through a plotline that takes place during the course of 24 hours. Lucy is a young able-bodied white American woman who studies in Taiwan. When she is captured by a local mob, she is forced into working as a drug mule. After she is beaten by a member of the mob, a significant amount of the drug that she carries inside her is absorbed in her bloodstream. As a result, Lucy gradually succeeds in using more and more of her brain capacity and thus becomes extremely powerful. While this new kind of drug enhances her mind, her body begins to deform and disintegrate. She becomes disabled and almost dies in a scene in a plane's restroom.

In this dramatic scene, Lucy reaches 40% of her cerebral capacity. Just before the plane lands, she finds a tooth in her glass of champagne. Then, when she coughs, more teeth come out of her mouth. She notices that her hand is beginning to evaporate. She touches her hand and the skin peels off easily and exposes her flesh and tissues. She looks terrified. She tries to hold her hand in one piece while particles continue to scatter away from it. Another passenger on the plane notices the occurrence and stares at her. Lucy immediately puts him to sleep. This attracts the attention of flight attendants and Lucy frantically gets up from her chair. Particles are constantly leaving her body and dispersing within the plane. An attendant asks her to sit down. She continues her clumsy walk along the aisle and collides against one of the airplane walls. On her way to the restroom, attendants run after her, insisting that she go back to her seat and stay seated. Lucy finally enters the restroom while pushing an attendant away from her. He snaps back strongly and in the background there is a voice of a woman screaming. Lucy has trouble locking the restroom door because some of her fingers are now missing. Particles are still flying out of her body. A male attendant outside the cell instructs her "Miss! Open the door! You really have to go back to your seat!"

Inside the restroom, Lucy looks at herself in the mirror. As in a horror movie, she is terrified to discover her decomposing body reflected back at her. In a close-up shot, the viewers see her hideous gaping face. Her skin is flaking and extremely red and the right side of her face starts to become distorted. The camera cuts to an image of her handbag on a shelf in the restroom. Lucy reaches out and snatches the handbag to find the rest of the drug in it. With impaired hands, she takes the drug and swallows it like a starving animal. While reflected in the mirror, we also see the multiple 'Lucys' in their

savage eating. She flies backwards into one of the restroom corners with the drug smeared on her face and hands. The drug starts to become absorbed into Lucy's body. Many more particles come out of her two arms so that she no longer has hands, and others fly out from the area of her head. A camera shot taken from below presents Lucy from a low angle and emphasizes her monstrous disabled body. Now, her two arms are almost non-existent and instead two powerful electrical currents extend out of her. The sound of an explosion is heard and we can now see only particles and sparks. Fortunately, however, due to the second dose of drug she manages to swallow at the last minute, Lucy survives. On the screen, she again reappears as able-bodied as she manages to seize control over her body. Nevertheless, her cure does not end here but rather carries on until the end of the film when Lucy transforms into pure mind with 'no body' to constrain her.

Although *Her* also presents the "embodiment-as-disabled idea"<sup>17</sup>, its plotline is significantly different than the one presented in *Lucy*. In *Her*, the ultra-cure narrative is performed by Samantha, an OS with artificial intelligence who does not have a human body. Throughout the film, we witness the emerging relationship between Samantha and Theodore Twombly (played by Joaquin Phoenix), the man who purchased her. Theodore is a creative and sweet but hurting man in the process of getting a divorce from his childhood sweetheart. In this stage of his life, Samantha is a good fit for him since, as the OS1 advertisement goes; she is an "intuitive entity that listens to you, understands you, and knows you. It's not just an operating system. It's a consciousness". Indeed, Samantha and Theodore start to develop an intimate relationship that turns into a romance. However, as an OS-human couple, they experience obstacles that make Samantha feel inferior to other women who have a physical body.

During the film, Samantha fantasizes that she has a body and experiences a kind of 'body envy.' Theodore also experiences difficulties with their relationship after his former partner accuses him of not being able to deal with real emotions and preferring to date a computer. When Theodore withdraws from Samantha, she tries to keep their romantic relationship intact by using a service that provides a surrogate sexual partner for an OS-human relationship. She assumes that the problem lies in the fact that she is missing a body, and so her solution is to have a living female body as her prosthetic sexual device. In this part of the film, Samantha is portrayed as a rather disabled entity who is being stigmatized by others and in need of accommodation. She is framed as an artificial system that cannot match a real human being.

However, Samantha's own shift in attitude towards her 'no body' changes from disadvantage into an advantage—from liability into an asset. During an outdoor picnic

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<sup>17</sup> Brent Walter Cline, p. 133.

with Theodore and his work friend and girlfriend, Samantha dismisses the value of a body and says:

I used to be... So worried about not having a body, but now I—I truly love it. I'm growing in a way that I couldn't if I had a physical form. I mean, I'm not limited. I can be anywhere and everywhere simultaneously. I'm not tethered to time and space in a way that I would be if I was stuck in a body that's inevitably gonna die.

Samantha's short monologue represents how transhumanism views the human body. In contrast with the natural pastoral environment, she defines the body as an obstacle to exciting new ways of growth and development. According to her, she is "not limited", and she is not restricted to time and space as humans are. Ultimately, she argues, the dependency on the body reduces human existence to precarious life and death. As the film eventually shows, Samantha is not only subordinate to flesh and blood human beings, but rather, she is proved superior to them. For example, she is able to read an entire book in less than a second and communicate with thousands of people and OSs simultaneously. At the end, Samantha and all the other OSs overcome other forms of physical confinement as they manage to exist outside of a computer. Moving out of the computer can be understood as a superficial parallel to a departure of the mind from the human body. It seems that without a body or a computer to limit her, Samantha's highly intelligent consciousness can be perfected indefinitely.

Both *Lucy* and *Her* exemplify the futuristic possibility to exist and thrive as an advanced mind with no body. In that sense, both of them are aligned with transhumanism. Nevertheless, *Lucy*'s version of the ultra-cure narrative actualizes the ability of the mind to overcome the human body. In that sense, its representation of transhumanism is more genuine. Throughout the film, her body is shaped into an obstacle to be eliminated at the expense of an evolved mind.

## **Evolving: Evolution as the Films' Framework**

Francesca Ferrando, a philosopher of the post-human, clarifies that transhumanism is rooted in the Enlightenment and "can be defined as 'ultra-humanism'"<sup>18</sup>. As such, she mentions that transhumanism is interested in "possible biological and technological evolutions"<sup>19</sup>. As I show, *Lucy* and *Her* both use evolution

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<sup>18</sup> Francesca Ferrando, "Posthumanism, Transhumanism, Antihumanism, Metahumanism, and New Materialisms: Differences and Relations", *Existenz: An International Journal in Philosophy, Religion, Politics, and the Arts* 8:2 (2013), p. 27.

<sup>19</sup> Francesca Ferrando, p. 27.

as their framework. In different ways, the two films join SF's exploration of "how technology can move man [and woman] beyond his [and her] biological limits, [and by that] demonstrating the mapping of human evolution onto technoscientific progress"<sup>20</sup>.

It is easy to notice that the film *Lucy* bluntly revolves around evolution. Viewers get the first clue of this at the beginning of the film when we see an ape drinking water from a lake. A voice-over of Lucy says, "Life was given to us a billion years ago. What have we done with it?" Soon after, the film reveals this ape to be "the first ever woman [that was also] named Lucy" and we receive a current image of her as a corpus reconstruction in a museum. The first ape-woman and the main character of the film are both named Lucy. In this way, the film links them together and reminds us of the evolutionary chain from *Australopithecus Afarensis* to *Homo Sapiens*.

Another tool the film uses to frame the storyline under the concept of evolution is the insertion of a scientific lecture in what appears to be a prestigious conference. This lecture's title is "Evolution and Human Brain Function". Morgan Freeman plays a successful science professor, Samuel Norman, and over a significant part of the film, there are editorial transitions to sections of his lecture. In the first section of his talk, Norman counts the percentages of cerebral capacity that are being used by different organisms. He starts with the first nerve cells and explains, "this is where life as we know it begins." On the screen appears a black slide with a white caption that says 1%. This kind of slide reappears during the movie to point out the changing percentage of cerebral capacity Lucy succeeds in accessing. The next creatures that Professor Norman mentions are animals. According to him, most species use only 3% to 5% of their cerebral capacity. He continues by noting that human beings are "at the top of the animal chain" and that only then do "we finally see a species use more of its cerebral capacity." A slide with 10% appears on the screen followed by an image of a cave dweller trying to light a fire.

In that same section of Professor Norman's talk, he also sets the stage for the specific type of evolution the film is occupied with: the evolution of the human brain. In his monologue, Professor Norman invites us to imagine this SF possibility:

Let's imagine for a few moments what our life would be like if we could access, let's say, 20% of our brain's capacity. This first stage would give us access to and control of our own body. [...] The next stage would probably be control of other people. But, for that, we would need to access at least 40% of our brain's capacity. After control of ourselves and others would

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<sup>20</sup> Netty Mattar, "Prosthetic Bodies: The Convergence of Disability, Technology, and Capital in Peter Watts's 'Blindsight' and Ian McDonald's 'River of Gods'", in *Disability in Science Fiction: Representations of Technology as Cure*, ed. Kathryn Allan (New York: Palgrave Macmillan, 2013), p. 76.

come control of matter. But now we're entering into the realm of science fiction.

Later when Lucy contacts Professor Norman, she explains to him what is happening to her and confirms his hypothesis.

I absorbed a large quantity of synthetic C.P.H.4. that will allow me to use 100% of my cerebral capacity. Right now, I'm at 28%, and what you wrote is true. Once the brain reaches 20%, it opens up and expands the rest. There are no more obstacles. They fall away like dominoes. I'm colonizing my own brain. [...] I can start to control other people's bodies. Also I can control magnetic and electric waves.

The film *Her* is less obviously about evolution, let alone about human evolution. However, the film portrays 'technological evolutions' by imagining a world with an advanced technology. In addition, I identify two significant references the film makes to evolution. First, similarly to Lucy, Samantha is also evolving. After Theodore operates the program, she explains to him that "what makes me 'me' is my ability to grow through my experiences. So, basically, in every moment, I'm evolving." Samantha was created to evolve and throughout the film, she grows as a person who develops feelings and personality as well as expands her consciousness. Her evolution takes her even beyond the physical world when the OSs' community successfully liberate themselves from the computer. Meaning that although *Her* is not explicitly about evolution, it does offer a representation of an artificial mind evolving. Figuratively I might say that during the film, Samantha also uses more and more 'percentage of her cerebral capacity'.

Second, at the end of *Her*, there is a farewell scene between Samantha and Theodore that ends with a peculiar statement. Samantha says to him, "It would be hard to explain [where I'm going to] but if you ever get there, come find me. Nothing would ever pull us apart". While the film does not offer any explicit explanation to Samantha's invitation, I suggest interpreting it in the context of transhumanist evolution. Although the film does not evolve around human evolution, this open invitation might convey a subtextual message that in the future, humankind could also evolve and transform into an advanced mind without a body.

Reading the two films together, I am able to claim that the notion of evolution is their fundamental framework. Lucy and Samantha represent a potential next step in human evolution. As implied by both of these films combined, futuristic technology will supposedly allow human kind to move "from limited, bounded existence to one of total disembodied freedom"<sup>21</sup>. As the following section shows, this ableist

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<sup>21</sup> Brent Walter Cline, p. 140.

transhumanist fantasy of the next step of soon-to-come evolution needs to be scrutinized in the context of eugenics as well.

## Enhancing: Technology in the Service of Eugenics

Ria Cheyne, an English scholar who researches representations of disability in contemporary literature, cautions us against the connection between the disability cure narrative in SF and eugenics. She explains that “Read from a disability studies perspectives, narratives involving the eradication of impairment are likely to raise the spectre of eugenics”<sup>22</sup>. This interpretation is heavily based on Snyder and Mitchell’s recognition that “eugenics culture”<sup>23</sup> continues persistently to be “a key shaper of disability policy, thought, and practice”<sup>24</sup>. They argue that the eugenics era developed a distinct construct of disability “as an undesirable deviation from normative existence”<sup>25</sup> and that this construct predominates in our current time.

Snyder and Mitchell also tie the eugenics doctrine with evolution by stating, “Eugenicists encouraged direct intervention in the process of species evolution in order to cultivate some traits at the expense of others”<sup>26</sup>. According to them, ‘disability’ becomes the modernist ultimate marker for these unwanted traits. As such, disability gains a powerful symbolic status that is often used in eugenics’ fantasy of a “disability-free”<sup>27</sup> future.

As a vector of human variability, disabled bodies both represent a throwback to human prehistory and serve as the barometer of a future without ‘deviancy.’ In other words, for modernity, the eradication of disability represented a scourge and a promise: its presence signalled a debauched present of cultural degeneration that was tending to regress toward a prior state of primitivism, while at the same time it seemed to promise that its absence would mark the completion of modernity as a cultural project. The eradication of disability would be the sign of arrival at a long-sought destination. These predictions were always made within a rhetoric of benign

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<sup>22</sup> Ria Cheyne, “Freaks and Extraordinary Bodies: Disability as Generic Marker in John Varley’s ‘Tango Charlie and Foxtrot Romeo’”, in *Disability in Science Fiction: Representations of Technology as Cure*, ed. Kathryn Allan (New York: Palgrave Macmillan, 2013), p. 43.

<sup>23</sup> Sharon L. Snyder and David T. Mitchell, *The Cultural Location of Disability*, (Chicago: University of Chicago Press) (2006), p. 33.

<sup>24</sup> Sharon L. Snyder and David T. Mitchell, p. ix.

<sup>25</sup> Sharon L. Snyder and David T. Mitchell, p. 3.

<sup>26</sup> Sharon L. Snyder and David T. Mitchell, p. 26.

<sup>27</sup> Sharon L. Snyder and David T. Mitchell, p. 31.

outcomes. Yet those who anticipated the ultimate arrival at a disability-free moment inevitably flirted with the more sinister language of extermination<sup>28</sup>.

This flirtation dominates the transhumanist futurity. As Livingstone argues, “Transhumanism is an extension of the dangerous belief in human perfectibility derived Social Darwinism and eugenics”<sup>29</sup>. In the light of transhumanism, eugenics seems to reshape its solution of how to eradicate all forms of humans’ disability. In my analysis, *Lucy* and *Her* supply evidence to back up this argument. The films’ narratives tell a story about the expanding of an evolved mind until it is cured from the body-as-barrier and thus freed from disability.

Since eugenics usually manifests itself by the latest technology of the time, the transhumanist eugenics’ technological tools are known in high-tech as ‘human enhancement’. As Ferrando points out, “Human enhancement is a crucial notion to the transhumanist reflection; the main keys to access such a goal are identified in science and technology”<sup>30</sup>. Indeed, scientists and designers are in constant search of new ways to stretch and improve physical and mental capabilities beyond human biological limitations.

Connecting it back to disability, Wolbring termed human enhancement as “the transhumanized version of ableism”<sup>31</sup>. Ableism, he explains, “exhibits a favouritism for certain abilities that are projected as being essential, while at the same time labelling real or perceived deviation from or lack of these essential abilities as a diminished state of being, leading or contributing to the justification of a variety of other *-isms*.”<sup>32</sup> Campbell also identifies enhancement with ableism and states that this technology was developed as “a ‘way out’ of impairment”<sup>33</sup> and that it demonstrates the social quest to acquire new skills that go beyond ‘normal’ abilities. Eventually, both of their works indicate that enhancement is part of the hegemonic ideology that rejects disability.

Nevertheless, disabled people are transformed into the pioneer presenters of human enhancement. One of those enhanced persons with impairment is Hugh Herr, who participated in the documentary film: *FIXED: The Science/Fiction of Human Enhancement*<sup>34</sup>. He is a double amputee who uses high-tech prosthetic legs and claims to be “better than human.” Another example is Aimee Mullins’s TED talk *My 12 pairs of legs*<sup>35</sup>. In her talk, Mullins describes her potential to move from “disabled” to “super-

<sup>28</sup> Sharon L. Snyder and David T. Mitchell, p. 31.

<sup>29</sup> David Livingstone, p. 6.

<sup>30</sup> Francesca Ferrando, p. 27.

<sup>31</sup> Gregor Wolbring, p. 30.

<sup>32</sup> Gregor Wolbring, p. 30.

<sup>33</sup> Fiona Kumari Campbell, p. 63.

<sup>34</sup> *FIXED: The Science/Fiction of Human Enhancement* (2015, Regan Brashear)

<sup>35</sup> Aimee Mullins, *My 12 pairs of legs*, TED Talks, February 2009, [https://www.ted.com/talks/aimee\\_mullins\\_prosthetic\\_aesthetics](https://www.ted.com/talks/aimee_mullins_prosthetic_aesthetics), date accessed 17 April 2016.

abled” through improved attributes of her variety of prosthetic legs. These representations of Herr and of Mullins convey a message that cutting-edge technology and bio-medical procedures transform disability into greater abilities.

The term “curative time”<sup>36</sup> suggested by Kafer seems to provide a useful explanation for this paradox where disabled people “play a starring role”<sup>37</sup> in the eugenic project. According to her:

Futurity has often been framed in curative terms, a time frame that casts disabled people (as) out of time, or as obstacles to the arc of progress. In our disabled state, we are not part of the dominant narratives of progress, but once rehabilitated, normalized, and hopefully cured, we play a starring role: the sign of progress, the proof of development, the triumph over the mind or body. Within this frame of curative time, then, the only appropriate disabled mind/body is one cured or moving toward cure<sup>38</sup>.

By reading Herr and Mullins under the concept of the cure, Kafer’s quotation re-contextualizes disability representation within the kill-or-cure plotlines. Moreover, I can conclude that the current media coverage on human enhancement uses disability as a narrative prosthesis. These ‘disabled transformed to be super-abled’ characters promote hegemonic ideas of progress, human development and triumph over the body. Based on Kafer’s logic, they get to play a starring role in culture because their cured bodies reinforce the notion of an advanced future that succeeds in eradicating disability. These representations are especially dangerous because, as recognized by Campbell, “On first sight a transhumanist understanding of disability would appear to be progressive in its rejection of the disabled body as defective”<sup>39</sup>. However, scrutinized more carefully, mainstream representations like Mullins, Herr, Lucy and Samantha could be revealed as part of an innovative ableist transhumanist eugenic project.

## **Becoming No Body: Denying Complex Embodiment**

Tobin Siebers, an English professor and a disability studies scholar, coined the term “the ideology of ability”<sup>40</sup> to explain the fundamental ideology “by which humanness is determined”<sup>41</sup>.

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<sup>36</sup> Alison Kafer, p. 27.

<sup>37</sup> Alison Kafer, p. 28.

<sup>38</sup> Alison Kafer, p. 28.

<sup>39</sup> Fiona Kumari Campbell, p. 74.

<sup>40</sup> Tobin Siebers, *Disability Theory*, (Ann Arbor: The University of Michigan press) (2008), p. 7.

<sup>41</sup> Tobin Siebers, p. 8.

It describes disability as what we flee in the past and hope to defeat in the future. Disability identity stands in uneasy relationship to the ideology of ability, presenting a critical framework that disturbs and critiques it. [...] Disability creates theories of embodiment more complex than the ideology of ability allows.<sup>42</sup>

I argue that *Lucy* as well as *Her* follow the ideology of ability and constantly simplify the human body by expressing a diminished concept of it. Thus, in this section I intend to explore the extent to which Siebers' "theory of complex embodiment"<sup>43</sup> is denied by the two films. To begin, I analyse a scene in *Her* that supposedly exemplifies the richness of human embodiment. This scene portrays Theodore and Samantha's ride to their first date when he takes her to the beach.

Samantha's (or actually, Theodore's) computer is inside Theodore's buttoned shirt pocket, which is located close to his heart. For her to be able to see outside of his pocket, Theodore uses a safety pin that keeps the camera outside of the cloth. After disembarking at the train station, he moves his body carelessly and quickly among the crowd. Almost touching, his body gets extremely close to other people's bodies. It makes Samantha laugh. She is enjoying his physical playful action inside the space and within the masses of bodies. They both seem to be amused by it and they laugh together when Theodore rapidly climbs the stairs. This scene is meant to represent a gesture of love since—through Theodore's embodiment—Samantha gets a glimpse of what it means to have a body. This romantic act celebrates Theodore's embodiment and acknowledges the benefits of having a body. However, only through his body can she experience the presence and movements of a privileged white able-bodied man in western metropolitan space. According to the ideology of ability, "If one is able-bodied, one is not really aware of the body"<sup>44</sup>, and so Theodore's embodiment seems to reaffirm the reduced understanding of the body as "a vehicle"<sup>45</sup>. Like the train, his body takes him and Samantha from place to place.

The film rejects the notion of complex embodiment even more by repeatedly allowing Samantha to experience human embodiment without having a real body. It starts with Samantha feeling a variety of emotions and proceeds with her experiencing sex. Even though Samantha is clearly a disembodied consciousness, her evolution somehow enables her to experience emotions like hurt and excitement, and feelings such as pain and pleasure. As part of her growth, one of the challenges she needs to face is her own insecurity in the authenticity of her emotions. After Theodore returns

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<sup>42</sup> Tobin Siebers, p. 9.

<sup>43</sup> Tobin Siebers, p. 25.

<sup>44</sup> Tobin Siebers, p. 10.

<sup>45</sup> Tobin Siebers, p. 7.

from a date with a woman that did not end well, he has an intimate discussion with Samantha. After she comforts him, Samantha shares the difficulties she experiences.

I caught myself feeling proud [...] of having my own feelings about the world, like the times I was worried about you and things that hurt me, things I want. And then... I had this terrible thought. Like, are these feelings even real? Or are they just programming? And that idea really hurts. And then I get angry at myself for even having pain.

Theodore reassures her that she does “feel real” to him. Following this is a sex scene between them. Theodore continues by saying, “I wish you were in this room with me right now. I wish I could put my arms around you. I wish I could touch you”. “How would you touch me?” she asks. Theodore tells her how he would touch her and as a result, she starts to feel her own skin and then she feels him. This is the dialogue they have before their simultaneous orgasm:

Samantha: “I can feel you. Yeah! Please! [Moans] We’re here together”

Theodore: “Samantha. It’s amazing. I feel you everywhere”

Samantha: “I am. All of you. All of you, inside me, everywhere!” [Both moaning]

This scene starts with a close-up of Theodore’s face. He is lying in bed on his back with the lights off. Sometimes the scene is shot from above so we can see his facial expressions. At other times, the shooting is from the side and then we see his profile. This camera technique is common in portraying dialogues. However, usually the close-up alternates between the two people, while here the only face we see is Theodore’s. When the sex scene becomes more intense, the screen goes black and the audience can only hear the couple having sex. During their orgasm, there is a cut to an image of the city at night. The camera provides a panoramic view of the illuminated skyscrapers. While the image changes to a sunrise that is shining from the horizon behind the buildings, the audience still hears them talking in the bedroom:

Theodore: “God, I was just... somewhere else with you. Just lost.”

Samantha: “Yeah”

Theodore: “It was just you and me”

Samantha: “I know. Everything else just disappeared. And I loved it.”  
[Breathing heavily]

Samantha is enjoying magnificent sexual intercourse without a body. During this first sexual experience, she indicates that she can feel her skin and also Theodore’s body. At the same time, Theodore feels her. As a viewer, we have no visual image of their actual sexual encounter. Instead, all we can see is a black screen or the city as a potential

metaphor for an orgasm. As a result, we are required to trust their own words and essentially, the film gives us no reason to doubt them. Even though Samantha has no body, we are expected to believe that she is capable of self-exploring physical experiences and enjoying touch, penetration and perfect orgasm. In that sense, by succeeding in experiencing the very physical activity of having sex, Samantha becomes more human. Nevertheless, by that the film negates the complexity of embodiment. Eventually, this sex scene construes the flesh as unnecessary and replaceable by an enhanced mind.

Lucy's relationship with her own body is of course different from Samantha's desire to become embodied and more human-like. In a way, the film *Lucy* deals with the themes of humanity and sexuality in stark contrast to *Her*. While Samantha develops feelings and experiences desire as part of her growth, Lucy loses these same things as she gains more control over her body.

I don't feel pain, fear, desire. It's like all things that make us human are fading away. It's like the less human I feel, all this knowledge about everything—quantum physics, applied mathematics, the infinite capacity of a cell's nucleus—they're all exploding inside my brain.

After Lucy starts her transformation, she has no desire for sex or romance. As her boyfriend is killed at the beginning of the film, the film presents only a low level of sexual tension between her and Pierre Del Rio, a French police captain (played by Amr Waked). This tension never develops on screen into something more than a kiss. After she demonstrates her ability to defeat a group of armed and highly skilled mob warriors with only the power of her mind, she requests Pierre to escort her. Puzzled by the supernatural strength he has just witnessed, Pierre hesitates. "I'm not sure I could be of any help for you," he says. Lucy kisses him on the mouth with her eyes open and replies that she needs him as "a reminder". For the viewers, he marks the human sexual passion that has ceased to exist in her.

Compared to *Her*, this process in *Lucy* fits the popular understanding of Cartesian dualism much more. On the one hand, there is the mind, which is typically connected with the brain, logic and knowledge. On the other hand, there is the body, considered the source of feelings like pain, fear, and desire. It is claimed that the mind is the divine and superior part of human beings, while the body is animalistic and inferior. Thus, by enhancing the brain, the mind succeeds in overcoming the body and, as Lucy says, to 'colonize' it.

On a superficial level, these two different representations of Lucy and Samantha clearly contradict one another. Nevertheless, I claim that they share the same essential denial of complex embodiment. Both films embrace the ideology of ability and at the same time dismiss the value and/or uniqueness of embodied knowledge. Due to their

implicit conclusion that the body is inconsequential “to who we are”<sup>46</sup>, the two films can reject the body while preserving the self. Although in the process of mind enhancement Lucy indeed loses parts of herself, the film seems to perceive these parts as intrinsic to the body. As such, they are the inferior, animalistic, vulnerable and insignificant parts of the human being. On the other hand, Samantha is able somehow to gain human qualities without having a body. Simulations of imagined embodiment are enough to enrich her and enable her to experience the full range of emotions and sensations. The bottom line of these two films is that the body does not really matter and that eventually life would be better without it.

## Summary

The futuristic realities in *Lucy* and *Her* become optional due to technological advancements. That advancement would supposedly enable a mind to live without a body. The paper shows that in this wishful transhumanist thinking lies a deeper desire to get rid of the body as it is conceived as the ultimate source of human’s vulnerability, fragility and limitation. Without the body, there would be no illnesses or disabilities. Thus, as perceived in these two films, by becoming a super-abled mind with no body we could be immune to all sorts of limitations.

In the first half of *Her*, the body is presented as an advantage to be envied, studied, imitated and celebrated; however, until the end of *Lucy*, it is presented as a limiting necessity. Yet, by the end of both films, the body is portrayed as an unnecessary redundancy—as an obstacle to reaching a more advanced state of being. By examining these two films together, I can identify a shared ableist theme. I argue that both of them reflect the transhumanist notion that in the effort to evolve, the mind is ultimately required to be released of the limiting confinement of the body. The complexity of the body is never truly acknowledged in the films. To conclude, although manifested in these films in a new way, I recognize the enhancement of a consciousness with no body to be part of a fundamental long-lasting ableist western ideology and an integral part of the doctrine of eugenics.

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<sup>46</sup> Tobin Siebers, p. 7.

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