Science Fiction Film and Becoming Otherwise

Woundedness, Posthuman Performativity, and Reinventing Subjectivity

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In memory of Joë Bousquet, who taught me that there is a beautiful momentum in woundedness.

Abstract

This thesis is about becoming otherwise. The notion of Man, occupying the central position within the processes of meaning-making, needs to be accounted for affirmatively. Doing so becomes increasingly pressing as our particular world that we live with wants to, more or less gradually, implement the technology of genetic engineering. Despite being present in our awareness since the 1970s, this technological development is still proving to face us with questions that are not at all easy to answer. They ceaselessly make us wonder: what would it mean to engineer genetically? What and who would emerge if this technology was engaged with? How would we think of ourselves if genetic engineering became an integral part of how we make sense of the world?

This thesis shows that we are not at all oblivious to those questions. We have already been developing particular literacies upon discourses that are already there. Those literacies can be found in science fiction cinema, a genre that has always remained curious about newly emerging scientific and technological developments. This thesis offers a reading of two science fiction films – *Blade Runner* and *Gattaca* – to let us come closer to the question of what would it mean to find a new unit of reference and become otherwise about frameworks upon which we have been developing our subjectivities.

Frameworks around genetic engineering and science fiction films might not be generous. Nevertheless, this thesis shows that thanks to the notion of woundedness, one might come closer to developing an affirmative outlook on those frameworks. Becoming otherwise can take place thanks to the wound. Becoming otherwise, in the case of this thesis, means reinventing subjectivity and inventing a posthuman performative subjectivity. Nothing should be seen as predetermined. This thesis embraces this thought and offers us respite.

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Introduction

Watching the films distressed

is how we become

Blade Runner

> Early in the 21st Century, the Tyrell Corporation advanced Robot evolution into the Nexus phase – a being virtually identical to a human – known as a REPLICANT. The Nexus 6 Replicants were superior in strength and agility, and at least equal in intelligence, to the genetic engineers who created them. Replicants were used Off-world as slave labor, in the hazardous exploration and colonization of other planets. After a bloody mutiny by a Nexus 6 combat team in an Off-world colony, Replicants were declared illegal on earth – under penalty of death.[1]

In 1982 international cinema audiences were gifted with a film that was meant to provoke a sense of distress, anxiety, and repulsion. Quite rightfully so, as Ridley Scott's *Blade Runner* has entered the cinematic realm imagining the city of Los Angeles as never before, covered in eternal darkness, pouring rain, and debris. By introducing the figure of the Replicant as one that rebels against its human master, the beholder encountered Rick Deckard – known as a blade runner[2] - a police officer performing a special role of detecting and shooting to kill every rebellious Replicant. The link between the trespasser and Deckard, forced to fight for his life in duels confronting him with figures surpassing him in strength, stamina and certainly not lagging behind him with their acuity, was meant to confront the viewer with a human versus nonhuman distinction. The Replicant's superior bodily agility and remarkable mental acuity were established to ensure its aptitude to fulfil its perfectly designed roles meant to be played in the society run by humans. Replicants were supposed to accompany humans, not rebel against them. They were meant to do so by making the best possible use of their physical abilities facilitated by advancements in biotechnological methods – including enhanced strength, agility, endurance and mental acuity. The Replicant was supposed to lead its existence as a "personal body servant or a tireless field

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[1] *Blade Runner*, directed by Ridley Scott (Warner Bros. Pictures, 1982/1992), 0:02:13-0:03:02, https://rakuten.tv/nl/movies/blade-runner-director-s-cut?q=blade%20runner%20director%27s%20cut.

[2] To avoid confusion that might result from naming, I will address the character of Rick Deckard in my discussion with a spelling that does not include capital letters and keep the title of the film written in italics.

hand."[3] It was supposed to remain forever grateful for the fact of being brought to life with the help of human-made technology.

Developing the human versus Replicant distinction, based on sharing the figure of a blade runner as a human whose assignment is to detect and annihilate any disobedient being, had an unmistakable aim. The Replicant, genetically engineered with the help of advancing biotechnology, was supposed to see its human inventors as superior and having all the power to control its existence. Nevertheless, the Replicant rebels and thus refuses the gift of life that it has been given. The human-made figure ignores the rule that one is reminded of when wondering about the human and a man-made nonhuman relation: "A robot may not injure a human being, or, through inaction allow a human being to come to harm."[4] In *Blade Runner* the notion of human superiority to all that is nonhuman is on top of the hierarchy. The film does its best to let its audience conclude that whatever it takes, this hierarchy should remain untouched.

What emerged alongside *Blade Runner*'s take on the notion of the human in danger have been utterly rational interpretations of some writers whose interest the film attracted. Events that Deckard engaged with throughout the film, perilously and fiercely fighting for his life, have turned out to generate judgements characterised by a similar line of reasoning. The film, introducing the figure of the Replicant in the way that we can infer from the starting quote of this section, has appealed to the academic world as a symbol of a threat posed by emerging and developing technology. Naturally, a figure that is just like human but gifted with features that allow it to surpass what humans are able to do, must have provoked a sense of disconcertment and fear. The Nexus 6 Replicant turned into an embodiment of a technology "that may absorb, enslave or annihilate us if we fail to treat it wisely," as Kevin LaGrandeur put it.[5] As the Replicant turns out to overthrow the hierarchy that was supposed to remain untouched – by deciding to take the human life – we are faced with written interpretations that convince us that

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[3] *Blade Runner* (1992 version), 0:08:37-0:08:40.
[4] Isaac Asimov, *I, Robot* (London: Panther Books Ltd, 1975), 8.
[5] Kevin LaGrandeur, "Androids and the Posthuman in Television and Film," in *The Palgrave Handbook of Posthumanism in Film and Television,* ed. Michael Hauskeller, Thomas D. Philbeck and Curtis D. Carbonell, (London: Palgrave Macmillan, 2015), 119.

developing biotechnology should be predominantly seen as threatening the familiar human world. Indeed, S.L. Karwande stresses that *Blade Runner* as a science fiction film paints a picture of a "negative science" as the superiorly strong, acute, and agile Replicant dares to frighten the human.[6]

We can see that *Blade Runner* faced both the cinematic as well as academic world with a cumbersome notion that the human-made nonhuman body objects to remain what it should: controllable, predictable, leading the life as it has been planned by its creator. The science fiction classic introduced by Ridley Scott provided us with a rather dubious gift by introducing the figure that feels to be improbable to be seen as something otherwise than sinister. The film confirmed that science fiction cinema faces its audiences with grim conflicts between what is human and what is not.[7] Such an introduction of the Replicant, a result of advancing biotechnology, further turned us wary of that technology. It might offer us a chance to enhance the body, but it nevertheless poses the risk of resulting in a world that the human will not be able to control fully, with a world that threatens rather than accompanies.[8] The Replicant, therefore, is not merely a slave labourer gifted with enormous stamina. We learn that it is an embodiment of risky events and uncertainty that humans do not want to face if biotechnology proves to allow for engineering human-like figures.

Gattaca

> My real resume was in my cells. Why should anybody invest all that money to train me when there are thousand other applicants with a far cleaner profile? Of course, it's illegal to discriminate. 'Genoism,' it's called, but no one takes the law seriously. If you refused to disclose, they can always take a sample off from a doorhandle or a handshake, even the saliva on your application form. If in doubt, illegal drug test can just as easily become an illegal peek at your future in the company.[9]

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[6] S. L. Karwande, "Projecting Technophobia: Science Fiction Disaster Film and Posthuman Technology," *Cosmos Multidisciplinary Research E-Journal* Vol. 3, No. 2 (2018), 34.
[7] Dónal P. O'Mathúna, "Autonomous Fighting Machines: Narratives and Ethics," in Hauskeller et al., eds, *The Palgrave Handbook of Posthumanism in Film and Television*, 148.
[8] Karwande, "Projecting Technophobia," 33.
[9] *Gattaca,* directed by Andrew Niccol (Columbia Pictures, 1997), 0:15:53-0:16:37, https://www.primevideo.com/detail/0GQGTTMJCM1PDHQWANMLX1WCPS/ref=atv_sr_fle_c_Tn74RA_1_1_1?sr=1-1&pageTypeIdSource=ASIN&pageTypeId=B06XTZFC45&qid=1657355668.

A couple of years after having been gifted with the intimidating figure of the Replicant, the realm of Hollywood cinema welcomed another take on the notion of what the appearance of genetic engineering might signify. Directed by Andrew Niccol, the 1997 science fiction film *Gattaca* brought another ration of distress and anxiety generating outlooks on how a world of "the not-too-distant future" might operate if genetic engineering became an integral part of society.[10] Similarly to *Blade Runner*, *Gattaca*'s protagonist, Vincent Freeman, embodied the idea of fighting against what biotechnology can bring. However, as Rick Deckard in Scott's film was facing the alarming results of genetic engineering in the form of a rather external force, Vincent Freeman showed that the emerging practice could become remarkably intimate to the notion of how one develops one's sense of self.

As we can infer from the quote above, the bottom line of *Gattaca* consists of following Vincent's musings on how an obsession with genetic identity operates in the society that he becomes part of. In the future that has welcomed genetic engineering to one of the most intimate aspects of life – that of becoming parents – and rendered the practice an integral part of the decision-making process behind parenthood, being born with any "critical predispositions" [11] to genetically conditioned diseases or "prejudicial conditions" is unthinkable. On the one hand, *Gattaca* shared a promising perspective on genetic engineering as a technology that allows for ensuring that one's child will not be burdened by any illnesses or prejudicial characteristics which emergence can be deduced from the DNA material. On the other hand, it impeded the viewers' will to develop a hospitable perspective on that technology. The film's protagonist was introduced as one of the last to have been conceived without any biotechnological intervention to his genetic profile, which rendered him one of the most disadvantaged individuals possible in *Gattaca*'s cinematic society.

The non-genetically engineered individual is the one who suffers in *Gattaca*. The film has turned out to be seething with an obsession with information that can be deduced from genetic profiles. It has offered a bold suggestion that the only aspect that counts when one becomes part of that future society

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[10] *Gattaca*, 0:04:24.
[11] Ibid., 0:11:30-0:12:01.

and begins to relate to its members is the validity of that profile. Jon Frauley owns that *Gattaca*, through introducing the notion of "genoism" – introduced in the quote above – simultaneously renders it the central concept upon which the narrative unfolds.[12] For him, the film depicts what might happen if genetic engineering is engaged with in a blind way. It shows how the emerging technology allowing for this practice can "underwrite marginalization, exclusion, and domination."[13] David A. Kirby adds to this interpretation as he admits that *Gattaca* shares a view of a society running on genetic determinism, ensuring that readouts of an individual's genetic material "would no longer serve as tentative predictors of possible futures, but would be viewed as unalterable prophecies."[14] What one's genetic profile brings, whether genetically engineered or not, should be seen as the only valid source of information upon which the questions of 'am I worthy of performing this role,' or 'should I relate to this individual' should be answered. Based on such interpretations, it makes perfect sense to argue that *Gattaca* allowed for noticing that the practice of genetic engineering can be incredibly damaging. Upon following Vincent Freeman's struggles at realising his dream, fraught with encounters clearly characterised by discrimination resulting from his in-valid genetic profile, the viewers were led to the thought that genetic engineering poses a gruesome risk of turning humans into nothing more than a sum of genes.[15]

As the social inclusion of genetic engineering in the future world of *Gattaca* proves so harmful, the film consequently allowed for asking the question of whether we are willing to suffer this harm or whether we decide not to engage with the practice in such an intimate way as future parents in the film decide to. After all, we can see that the film's interpretations prove that its bottom line brings the notion that through the practice of genetic engineering, the complexity of a human being might be reduced to the analysis of a genetic material supposed to predetermine traits believed to characterise an individual. If that is the case, then perhaps the practice should be banned altogether. If we remind ourselves of how

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[12] Jon Frauley, *Criminology, Deviance, and the Silver Screen: The Fictional Reality and the Criminological Imagination* (New York: Palgrave Macmillan, 2010), 209.
[13] Frauley, *Criminology, Deviance, and the Silver Screen*, 214.
[14] David A. Kirby, "The New Eugenics in Cinema: Genetic Determinism and Gene Therapy in *GATTACA*," *Science Fiction Studies* Vol. 27, No. 2 (2000), 203.
[15] Kirby, "The New Eugenics in Cinema," 193.

Blade Runner's story has been interpreted – seeing the possible results of genetic engineering as insufferable – thanks to *Gattaca,* we are once again briefed that the developing technology poses a risk of bringing worlds that we should be repulsed by. Films like *Blade Runner* and *Gattaca* have allowed us, and are still allowing, to develop our approaches to the question of whether we should embrace genetic engineering. Film quotes introduced above, as well as cited written interpretations of what the films offer, show that we might not develop a generous outlook on the practice and approach it rather as sinister. Nevertheless, such an outlook is what we have, and it provides us with a certain literacy, with a certain way of making sense of the topic.

How do we begin?

This thesis will allow me to think with interpretations of technology of genetic engineering as introduced with the help of science fiction films *Blade Runner* and *Gattaca* to indicate them as not only pessimistic towards that technology as well as not to be seen as dominating the ways of thinking on the topic that can emerge. My reading will offer the concept of the wound as one upon which an exploration of possibilities of thinking otherwise about the notion of engineering genetically can unfold. I have started with references to *Blade Runner* and *Gattaca* for two reasons.

First of all, we are now living in the moment when the technology of genetic engineering more than ever proves its rapid development. From 2012 onwards, the biotechnological realm has attracted attention with the genetic tool known as CRISPR.[16] The tool turns out to allow its users to "target a specific genomic sequence […] to manipulate a specific gene of interest" to get rid of a gene or a sequence of genes responsible for a particular mutation or to add a specific gene to ensure the

[16] CRISPR is an abbreviation for "Clustered Regularly Interspaced Short Palindromic Repeats," a name used to address strategies developed by cellular organisms to fight invaders that prove parasitic for the host's genome. CRISPR emerges as a name applying to a naturally developed defence mechanism that allows cells to build up resistance to invading elements (like bacteriophages) which genetic structure turns out parasitic to one of the attacked organism. Essentially, CRISPR shows that a piece of a predator's genome can become part of the host's genome to let it be immune if the event of invasion takes place. Source: Magnus Lundgren, Emmanuelle Charpentier, and Peter C. Fineran, eds., *CRISPR: Methods and Protocols* (New York: Humana Press, 2015), v.

development of a particular physical characteristic.[17] The tool is celebrated for its remarkable precision, handling ease, and cost-effectiveness.[18] Despite all that can be praised though, the question of what embracing the technology of genetic engineering might signify remains unanswered; or, instead, remains one that resists straightforward answers. Having the tool of CRISPR at hand adds nothing else but yet another layer of uncertainty to this question. Because of its convenience of use, the tool faces a quite probable entering into force and becoming part of the world that we are living in. This brings yet another layer to the discussions on genetic engineering, which are the calls for "broad ongoing participation and input by the public," coming from the direction of biotechnologists.[19]

These calls allow me to introduce my second reason behind starting my writing with two science fiction films: it concerns precisely the notion of them belonging to the genre of science fiction cinema. Jan Domaradzki, in response to increasing recognition of genetic engineering, emphasises that the developing technology attracts more and more social interest.[20] Despite its mistiness, especially for the layman public, emerging biotechnological practices are earning themselves an ever-expanding group of followers. The growing interest in biotechnology, as Domaradzki stresses, owes itself to popular culture, including the cinema. It is the cinema that provides a realm for thinking about emerging technologies and their possible social and ethical outcomes. It is a realm that comes with questions rather than answers. Moreover, it is the science fiction genre that proves to "present the primary information source" on the topic of genetic engineering for the layman public in the European and North American context.[21] Science fiction cinema occupies an influential position in the process of public formation of approaches to genetic engineering. It turns into the "medium by which individuals experience the

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[17] Synthego, "CRISPR 101: Your Guide to Understanding CRISPR," *Synthego,* 2021, https://www.synthego.com/resources/crispr-101-ebook (accessed February 16, 2022), 4.
[18] David Baltimore et al., "A Prudent Path Forward for Genomic Engineering and Germline Gene Modification: A Framework for Open Discourse on the Use of CRISPR-Cas9 Technology to Manipulate the Human Genome Is Urgently Needed," Science Vol. 348, No. 6230 (2015), 36.
[19] Christine Critchley et al., "Predicting Public Attitudes Toward Gene Editing of Germlines: The Impact of Moral and Hereditary Concern in Human and Animal Applications," Frontiers in Genetics Vol. 9 (2019), 2.
[20] Jan Domaradzki, "Popular Culture and Genetics: Genetics and Biotechnologies in the Movies," *Polish Sociological Review* Vol. 215, No. 3 (2021), 281.
[21] Angela Meyer, Amelie Cserer, and Markus Schmidt, "Frankenstein 2.0.: Identifying and characterising synthetic biology engineers in science fiction films, *Life Sciences, Society and Policy* Vol. 9, No. 9 (2013), 4.

biotechnological revolution," as Domaradzki puts it.[22] Asked to partake in the thinking process on the practice of genetic engineering, as a layman, then signifies thinking with cinematic pieces whose subject matter concern this very practice: films like *Blade Runner* and *Gattaca.*

We are entering a particular moment nowadays. With the 'we,' I mean those who watch science fiction pieces, often or less often, for academic purposes and otherwise; those wondering about genetic engineering with a background on the topic and otherwise; those who see emerging and developing technologies as "touching the core of our self-definition" to quote Jeremy Rifkin, as bearing the agency to make us wonder how we are relating to the world that we are part of.[23] The emerging question that I find particularly relevant now is how we are thinking with the works of science fiction cinema. How are we approaching films directed by Scott and Niccol, what are they making us think about the technology of genetic engineering, how are they allowing us to relate to that technology? I have already shared some of the interpretations of both films that become relevant in the context of such questions. Following those, *Blade Runner* and *Gattaca* are cinematic works that do not provide a generous outlook on the question of what might happen if genetic engineering became an integral part of our world. Watching those two science fiction films and thinking about their interpretations as shared before, I wondered: is it possible to think otherwise? Is it possible to see those films as not predominantly characterised by fear-filled and suspicious takes on genetic engineering?

As I communicated before, interpretations applicable to *Blade Runner* and *Gattaca*, to the genetically engineered figures and societies they propose, might not be of assistance to us if we decide to develop a hospitable outlook on the practice and approach it as otherwise than sinister. Nevertheless, those interpretations are valid to think with: as I mentioned already, they provide us with a certain literacy on the technology of genetic engineering and science fiction cinema.

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[22] Domaradzki, "Popular Culture and Genetics," 282.
[23] Jeremy Rifkin, *The Biotech Century* (New York: Penguin/Putnam, 1998), xii.

How are we going to think?

Throughout this thesis, I will explore possibilities of going beyond the idea that interpretations of genetic engineering developed based on its mediation in science fiction cinema are predominantly either demonising or overly favourable. To do so, as I mentioned before, I will offer the concept of the wound as one upon which an exploration of possibilities of thinking otherwise can emerge. I will propose different conceptualisations of this notion, all of which will find inspiration and basis in the writings of Joë Bousquet, Gilles Deleuze, and Rick Dolphijn.

My aim is to see the wound as a new unit of reference for us. To explore this thought, I will build my theoretical framework based on the posthuman theory developed by Rosi Braidotti and Karen Barad. By engaging with posthuman thoughts, I will be able to express the need for going beyond "the human, all too human, resources and limitations that frame our collective and personal levels of intensity and creativity," as Braidotti puts it.[24] In my reading, this need will concern both the technology of genetic engineering as well as science fiction cinema. To look for ways of thinking otherwise about those realms, I will find the notion of subjectivity crucial to my thesis. By approaching this notion as allowing for addressing how we think about ourselves, above all, I will trace how we have been becoming with the discussions on genetic engineering and science fiction film. To address the notion of how we can start looking for ways of becoming otherwise towards those realms, I will develop the concept of "wounded literacy" thanks to thinking with Maaike Bleeker.

I will approach this concept as affording us the possibility of becoming alert to what is already there in the form of simplifying interpretations. Wounded literacy, above all, will allow me to affirmatively think with what we already have to start thinking anew. With the help of this concept, I will address interpretations of *Blade Runner* and *Gattaca* not from the perspective of whether they should be deemed useful or not, liked or disliked. Instead, I will see these works as embodiments of discourses on the technology of genetic engineering and science fiction cinema that have been gradually sedimenting

[24] Rosi Braidotti, *The Posthuman* (Cambridge: Polity Press, 2013), 12.

and providing us with unfortunate outlooks. With unfortunate I mean simplifying, moving in the 'either/or' direction, hampering the will to develop interpretations that go beyond the either demonising or overly glorifying perspectives. I will see the interpretations based on which we are developing relations to *Blade Runner* and *Gattaca* as wounded by discourses that have already been there when they were made available for their audiences. I will approach the notion of literacy as a condition of making sense and, therefore, one upon which subjectivities are invented. With the help of my concept of wounded literacy, I will be able not to blame the already present interpretations of science fiction's outlooks on genetic engineering and develop a more compassionate and affirmative approach to them.

The concept of the wound will turn into a recurring theme throughout this thesis. Inspired by interpretations of *Blade Runner* and *Gattaca*, as briefly introduced above, I will explore why it counts to see those readings as wounded. My discussion will start to unfold in the first chapter by tracing how suspicious and fear-filled approaches to the technology of genetic engineering have emerged. Based on that, I will suggest that what such approaches see as dangers intrinsic to that technology can be seen as wounds. Such a conclusion will allow me to argue that if we opt for tracing how the woundedness of genetic engineering has been gradually developing, we might actually come closer to an approach called by Donna Haraway as "staying with the trouble."[25] Doing so becomes increasingly urgent as the calls for public engagement in the discussion on the (possible) broad inclusion of genetic engineering become burning.

Throughout the second chapter, I will look into how the woundedness of genetic engineering has been, and still is, lived in the realm of science fiction cinema. My approach to the cinematic genre will not be based on an analysis that would be the case for an essay inspired by film theory. Rather, what I will offer is a form of posthuman reading to account for the "human exceptionalism" that is so much present in our ways of making sense.[26] My focus will be attracted to identifying tropes and interpretations that can be found in the academic writing on films dating from the 1950s to the 1990s,

[25] Donna J. Haraway, *Staying with the Trouble: Making Kin in the Chthulucene* (Durham: Duke University Press, 2016), 1.
[26] Karen Barad, *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning* (Durham: Duke University Press, 2007), 136.

characterising the moment when genetic engineering technology started to form a particular discourse. My methodology will consist of tracing how the notion of posthuman has been emerging in those discussions. I will do so while keeping in mind my determination to find and embrace a notion that would later function as a new unit of reference for us: those willing to think otherwise about science fiction films inspired by newly emerging technologies. Therefore, I will propose the notion of "wounded posthuman" to let us move beyond seeing the notion of a stable human identity as a preferred unit of reference.

Throughout the chapters focusing on my case studies of *Blade Runner* and *Gattaca*, I will explore what I call a "posthuman performative subjectivity," a notion developed thanks to writing by Braidotti and Barad. Thanks to offering this concept, I will show how *Blade Runner* can in fact be interpreted as not merely introducing a threatening Replicant, a figure posing a danger to the notion of "being human." The fourth chapter brings *Gattaca* as a film that I will see as filled with relations that can take our thinking one step further. Even though the film is rarely interpreted from the posthuman perspective – or at least not from the perspective that I will advocate for – I will see it as providing us with a remarkably noteworthy approach to my main question: what might it mean to embrace woundedness to invent a posthuman performative subjectivity on science fiction cinema inspired by the technology of genetic engineering?

Sub-questions that will guide my thinking will ask: what kind of subjectivity have we been, and still are, developing based on already present discussions on and interpretations of genetic engineering and science fiction cinema? What kind of literacy are we developing alongside them? What would it mean to become otherwise in this context? What would it mean to see *Blade Runner* and *Gattaca* as companions in exploring ways of developing a posthuman performative relation with the wound as its unit of reference? My essay will show that we all are wounded and have always been. The question that I will make us able to ask ourselves will form upon Joë Bousquet's musings: how can we become men of

our misfortunes?[27] Throughout my thesis, I will show how, gradually, the wound – our misfortune – becomes liberating.

[27] Gilles Deleuze, *The Logic of Sense* [1979] (London: The Athlone Press, 1990), 149.

Chapter 1

Not yet there but already wounded: on genetic engineering

The (in)famous conference that has made us literate

> [Discourses are] practices that systematically form the objects of which they speak.[28]

I begin my discussion by referring to the quote above. Michel Foucault worked with the notion of discourse by treating it as one that evokes "the codes, conventions, representations, and habitual uses of language that […] generated historically and culturally specific fields of meaning," as Terry Smith puts it.[29] Discourse in this sense carries a remarkable agency as it becomes a specific mode of organising knowledge that structures how a given notion is socially understood. It emerges in a specific historical moment, a moment structured by bound and already present rules that define how originating knowledge will be legitimated.[30] Discourses become part of societies and are constantly reiterated by them: gradually, they become the bases upon which interpretations of given notions form. This process, however, does not happen immediately. As Foucault writes:

> […] in every society the production of discourse is at once controlled, selected, organised and redistributed by a certain number of procedures whose role is to ward off its powers and dangers, to gain mastery over its chance events, to evade its ponderous, formidable materiality.[31]

Some thoughts and interpretations are accepted within an emerging discourse; some are excluded. Finally, discourse will be formed and normalised, while judgments of a given topic will impose themselves upon individuals whose subjectivities will form accordingly. As Karen Barad writes in response to Foucault, discourse "constrains and enables what can be said;" it defines what can be

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[28] Michel Foucault, *The Archaeology of Knowledge and the Discourse on Language* [1969] (Tavistock Publications Limited, 1972), 49.
[29] Terry Smith, *Talking Contemporary Curating* (New York: Independent Curators International, 2015), 13.
[30] Foucault, *The Archaeology of Knowledge and the Discourse on Language*, 127.
[31] Michel Foucault, "The Order of Discourse," in *Untying the Text: A Post-Structuralist Reader* [1971], ed. Robert Young (Boston: Routledge & Kegan Paul, 1981), 52.

deemed meaningful.[32] Statements that emerge within a discourse originate "from a field of possibilities," a controlled field that does not merely describe subjectivities but produces them.[33] The notion of subjectivity, to come back to Foucault, is seen by him as "the way in which the subject experiences himself in a game of truth where he relates to himself;" it becomes that through which one embodies thoughts that discourse has internalised and develops one's considerations of, and approaches to, a given topic accordingly to that very discursive structure.[34] What is predominant in a discourse becomes an intrinsic part of how one connects to and makes sense of the notions in question. Going beyond the discourse becomes difficult, if not insurmountable.

I find Foucault's take on the concept of discourse especially applicable to the event that this section will find crucial and to the concept of wounded literacy that I will propose later. For now, I should specify how I approach the notion of literacy in this thesis. I do not only approach it as signifying an ability to read and write; I am inspired by Maaike Bleeker's take on the notion as she develops her concept of "corporeal literacy."[35] Bleeker finds inspiration in writing by Walter Ong, for whom literacy is a form of a mindset resulting from the expanding use of technologies of print and writing.[36] Those technologies, for Ong, do not only afford their users with ways of capturing, storing and disseminating what has previously been circulating in the spoken form only. Instead, he believes that turning language into the written and printed form has changed ways of relating to language itself. He sees it as having changed ways of "managing knowledge, of thinking, and of being."[37] Ong stresses that working with language that has been written down affords one to engage with it outside of the situation of its utterance, allows one to circulate it, analyse it in new ways, and somehow fiddle with it as it suddenly becomes easily available, whenever and wherever. Bleeker elaborates on Ong's approach by arguing that literacy can be approached as a "situated condition."[38] She sees such a condition as resulting from

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[32] Barad, *Meeting the Universe Halfway,* 146.
[33] Ibid., 146.
[34] Maurice Florence, "Foucault," in *Essential works of Foucault,* vol. 2, *Aesthetics, Method, and Epistemology,* ed. James D. Faubion (New York: The New Press, 1998), 461.
[35] Maaike Bleeker, "Corporeal Literacy," in *Re_Visioning Bodies,* ed. Daniel Neugebauer (Leipzig: Spector Books, 2022), 28-41.
[36] Walter Ong, *Orality and Literacy: The Technologizing of the World* (London and New York: Routledge, 1988).
[37] Bleeker, "Corporeal Literacy," 28-41.
[38] Ibid., 32.

various skills, ways of behaving, noticing, and thinking, acquired from coming in contact with the technologies of writing and print. Those particular behaviours influence our ways of understanding the world and others, as well as our situatedness in the world. Literacy, therefore, can be understood as concerning the notion of how different media and technologies afford, as well as affect, our ways of making sense of the world, different ways of engaging with what we encounter, how we respond to those stimuli, and how we develop new ways of thinking. Literacy turns into a particular condition of making sense which can take many forms.

I stated before that I am inspired by Bleeker's exploration of her concept of corporeal literacy. Let me elaborate on what intrigues me in her approach to this particular form of literacy. As she writes, corporeal literacy "as a conceptual tool sheds light on how the sedimented effects of bodily practices co-shape the human mind and the ways in which we perceive and make sense."[39] The mind, in this context, is by no means separated from the body but rather emerges "from the interaction of our bodies with the world we encounter," which also includes technologies.[40] This interaction proves crucial in Bleeker's elaboration on corporeal literacy as she approaches the processes of sense-making and perceiving as corporeal, unfolding upon active engagement with what given technologies, tools or environments afford us. Corporeal literacy forms upon gradually incorporated practices, behaviours, and habits afforded by what we engage with. Our bodies carry the potential to perform given actions, and thanks to corporeal literacy, we can notice how technologies develop alongside this potential.

Moreover, thanks to this new literacy, we can notice how technologies allow us to establish new behaviours (think smartphones and touchscreens that have prompted us to develop new types of movements, an example provided by Bleeker). As Alva Noë writes, our interaction with technologies changes "*what we do*, […] what we know how to do, […] what we are *ready* to do," and therefore transforms our ways of perceiving and making sense.[41] Also inspired by Noë, Bleeker writes that being corporeally literate "bears the traces of histories of engagement with various technologies and

[39] Ibid., 29.
[40] Ibid.
[41] Alva Noë, *Action in Perception* (Cambridge, Massachusetts: The MIT Press, 2004), 1. Emphasis in original.

environments as well as with other bodily practices like training and habits;" corporeal literacy is a process that is constantly transforming.[42] It consists of ways of using technologies, particular practices and behaviours that have been gradually sedimenting as part of how we are situated within a given cultural and historical moment. And, most notably for my analysis, corporeal literacy is a conceptual and analytical tool that "directs attention to these sediments and how they inform ways of perceiving and making sense."[43] It is a concept that allows us to notice and analyse what is already there, but we have been unsure how to address it. It is a concept that allows for exploring how we make sense of what we encounter. I will provide my take on how the concept of corporeal literacy can be fruitfully thought about when I engage in the analysis of *Gattaca*. For now, I want us to make a mental note of how Bleeker conceives the concept in the broad sense: as a tool that makes us notice particular situated conditions of making sense. Keeping in mind the concepts that I have already introduced – discourse and literacy in particular – I turn to tracing how the notion of the technology of genetic engineering has become part of professional discussions.

There is an event that I find particularly relevant to pay attention to. I see it so because I approach it as one that has contributed to the formation of discourse on genetic engineering and a formation of a particular literacy. The conference held in February 1975 at the Asilomar Conference Centre in Pacific Grove, California, is the one that we should scrutinise. Paul Berg, who himself was one of the conference's organisers, admits that it marked "the beginning of an exceptional era for science and for the public discussion" on how technology like genetic engineering should be approached.[44] Following Victor K. McElheny, who immediately responded to the event, biologists felt it necessary to gather due to a discovery that has been slowly taking shape since 1970. That was when molecular biologists "discovered a special class of enzymes they called 'restriction enzymes'," which provoked quite an interest on the part of fellow biologists.[45] The enthusiasm arose from the fact that the enzymes turned

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[42] Bleeker, "Corporeal Literacy," 41.
[43] Ibid.
[44] Paul Berg, "Asilomar 1975: DNA modification secured," *Nature* Vol. 455 (2008), 290.
[45] Victor K. McElheny, "World Biologists Tighten Rules On 'Genetic Engineering' Work," *The New York Times,* February 28, 1975.

out to carry the potential to recognise specific sequences of the DNA strand, make a cut in its previously uninterrupted continuity, and allow for re-joining and rearranging DNA strips in whichever way necessary and desired.[46] This discovery makes us think of a new tool of CRISPR brought up in the introduction, which prompts us to start thinking more about the technology of genetic engineering.

What I see as especially significant in this context is what reactions the discovery of restriction enzymes resulted in. Apparently, reports on the discovery greatly disturbed the members of the 1973 biologists' conference in New Hampton. They immediately perceived the revelation as carrying an incredible potential of resulting in hazardous incidents; the pessimistic interpretation of the then still hypothetical genetic engineering started to gather momentum. Thinking on the topic, the discourse around it that started to form, was moving in the direction of thinking against rather than thinking with. As some biologists of that day claimed, experiments based on the practice of making changes to the DNA material should be postponed or possibly abandoned.[47] What became the topic of the 1975 conference found its basis in those conclusions. To return to Berg, the Asilomar Conference became an event during which a possible perspective of manipulating the DNA material, hotly debated, turned into one that should be faced with a moratorium.[48] The Asilomar Conference resulted in the development of new guidelines that were one of the rarest of their kind regarding strictness: designed to limit a possible emergence of medical risks, for those engaged in the conversations saw the possibility of genetic engineering as alarmingly introducing the risk of producing microbes which, normally innocuous, might turn into "cancer-causing agents or into human pathogens."[49]

Above all, the notion of an emerging technology of genetic engineering presented an area "with many unknowns" filled with the perspective of biological materials and ideas that have never been encountered before.[50] Therefore, the main objective behind the guidelines included a restriction of "the

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[46] McElheny, "World Biologists Tighten Rules On 'Genetic Engineering' Work."
[47] Ibid.
[48] Berg, "Asilomar 1975," 290.
[49] Ibid.
[50] Paul Berg et al., "Summary Statement of the Asilomar Conference on Recombinant DNA Molecules," *Proceedings of the National Academy of Sciences of the United States of America* Vol. 72, No. 6 (1975), 1981.

usefulness of these tools to the laboratory, and [making] them unable to *invade* human beings."[51] John E. Smith's views on the conference can further clarify why such a restrictive, inhibitive approach was the case. As he stresses, the conference can be seen as both famous and infamous; both notions find inspiration in seeing the event as having become the one that has set the tone for most of the conferences and guidelines on genetic engineering that were to follow. Apart from that, members of the Asilomar Conference certainly did not have an easy task to perform, as the subject matter of the discussion included the potential of and appropriate management of the technology that was, at that time, a "highly speculative" one.[52]

The notion of DNA material that can be recombined was a huge novelty for the biotechnological world, and the same applied to its potential but certainly not definitive uses. What I find particularly compelling is the notion that the then purely speculative practice of genetic engineering turned out to quite swiftly result in an alarmed public response and an equally fearful media coverage bringing notions such as "Frankenstein foods,"[53] seen as the most direct possible result of the new technology.[54] The conference turned out to be taken to heart by influential – in the context of the emerging technology – institutions such as the American National Institute of Health that promptly concluded that the idea of making changes to the DNA material is so speculative that it is in fact hazardous. As Smith further underlines, such a way of reasoning set the tone and became a standard to be used by most world guidelines regarding the notion of recombining DNA materials; as he points out: "the damage was done."[55] The discourse around the emerging technology of genetic engineering started to form with a rather troublesome background.

There is yet another aspect that should also be taken into account here. As Andrew J. Hogan writes, the Asilomar Conference took place at the moment filled with a quite hostile attitude to newly

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[51] McElheny, "World Biologists Tighten Rules On 'Genetic Engineering' Work." Emphasis added.
[52] John E. Smith, *Biotechnology* (New York: Cambridge University Press, 2012), 232.
[53] "Frankenstein foods are produced from genetically modified organisms (GMO) which have had their genome altered through genetic engineering techniques." Source: Vasu Rustagi, "What is Frankenstein food?" *The Times of India*, March 17, 2007, https://timesofindia.indiatimes.com/what-is-frankenstein-food/articleshow/1775269.cms (accessed July 6, 2022).
[54] Smith, *Biotechnology*, 232.
[55] Ibid.

emerging scientific and technological developments.[56] The 1970s in the US turned into a "period of significant questioning of scientific and medical authority" resulting from journalists' and activists' digging into unethical research practices, an example of which is the Tuskegee syphilis case (see note).[57] Cases of that kind pointed out the notion that scientific and medical autonomy has been abused and overlooked for decades, based on the idea of serving public interests in the long run. The Asilomar Conference spotlighted and confirmed that both the political bodies and the public "were no longer willing to put their blind faith in the safety and social value of scientific research."[58] The notion that human DNA could be recombined and manipulated in a way to ensure the eradication of some characteristics and an obtainment of others turned out to prompt protests. One of such took place in 1977 during a meeting of the National Academy of Sciences focusing on recombinant DNA; the rebellion was rather painfully characterized by vivid posters citing the notion of "We will create the perfect race," as it was infamously pronounced by Adolf Hitler in 1933.[59] A highly speculative and certainly not definitive idea of manipulating the DNA material turned out to, first and foremost, remind of the practice of eugenics. A growing lack of credence in new technological and scientific developments certainly did not make the process of welcoming the idea of recombinant DNA to the public realm easier. On the contrary, the still unknown technology has rapidly started to earn a distrustful attitude. Not even being the case yet, the imagined practice was met with an almost instant demonisation. The reaction, most importantly, came from the direction of those specialised in the realm of biotechnology that genetic engineering found its basis in. I deduce that disquieted response has started to form a

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[56] Andrew J. Hogan, "From Precaution to Peril: Public Relations Across Forty Years of Genetic Engineering," *Endeavour* Vol. 40, No. 4 (2016), 218-222.

[57] In 1972 Jean Heller, working as a reporter for Associated Press, brought to light the case that shocked the American medical institutions. As she researched, the federal government of Alabama had brought hundreds of African-American residents of Tuskegee to suffer from untreated syphilis for research purposes. The study began in 1932 and lasted for forty years. When the research started, the discovery and wide availability of penicillin were still fifteen years away; in the post-war period though, when the cure for syphilis was already known, those suffering from the disease have nevertheless not been treated. The question of why that was the case, leaving the research purposes behind, remains unanswered. Source: Jean Heller, "AP was there: Black men untreated in Tuskegee Syphilis Study," *AP News*, May 10, 2017, https://apnews.com/article/business-science-health-race-and-ethnicity-syphilis-e9dd07eaa4e74052878a68132cd3803a (accessed July 18, 2022).

[58] Hogan, "From Precaution to Peril," 219.

[59] Ibid., 220.

discourse on the merely emerging technology, which would later mature into a particular form of literacy.

What literacy we have been developing

Let us come back to the notion that emerged in the previous section. The primary purpose behind the Asilomar Conference was to ensure that the emerging technology of genetic engineering does not "invade" humans.[60] What the notion reminds me of is what Jean-Luc Nancy once wrote:

> There must be something of the *intrus* in the stranger; otherwise, the stranger would lose its strangeness: if he already has the right to enter and remain, if he is awaited and received without any part of him being unexpected or unwelcome, he is no longer the *intrus*, nor is he any longer the stranger.[61]

The *intrus* (the intruder) is what I see as closely connecting to the notion of invasion. The merely emerging and still unknown technology of genetic engineering feels to have been approached as the *intrus*, precisely. As the predominant interpretation of the technology brings the notion of ensuring it does not invade what is already known, it starts to be seen as a strange force that is unexpected, and that should be kept as far away as possible. Just after having barely emerged in the imaginations and thoughts of those with expertise in the realm of biotechnology as well as those without it, the notion of being able to manipulate genetic materials turned out to connote incredibly straightforward and dichotomous interpretations. Those takes have turned out to earn themselves popularity and clout: the twenty-first-century discussions on the topic prove to propose the idea that the practice of genetic engineering, its inclusion in the world both scientific as well as social, political, ethical and otherwise, proves even more

[60] McElheny, "World Biologists Tighten Rules On 'Genetic Engineering' Work."
[61] Jean-Luc Nancy and Susan Hanson, "L'Intrus," *CR: The New Centennial Review* Vol. 2, No. 3 (2002), p. 1.

disturbing as it is seen as inevitable.[62] The emergence of CRISPR shows that such a notion is indeed the case.

Apparently, what has been a purely speculative idea seen with a fearful eye, nowadays still proves not to gift us with more generous thoughts. What emerges in the twenty-first-century reactions to the believed potential of genetic engineering are strongly demonising and fear-filled interpretations, juxtaposed with overly favourable takes on the emerging technology. Closely relating to what the Asilomar Conference resulted in, anxiety-filled responses focus on imagining the worst only, including the potential of the technology to "design and mass reproduce desirable traits."[63] Such a line of reasoning proves to be guided towards arguing that doing so will inevitably result in the emergence of new hierarchies and ways of discriminating. As we saw in the introductory chapter, interpretations of *Blade Runner* and *Gattaca* prove that such approaches are also very much the case for the non-scientific realm. Throughout this section, I will examine the question of what kind of subjectivity we have been developing based on already present interpretations of genetic engineering and what kind of literacy we have been developing alongside.

To begin, I focus on two predominant lines of reasoning that characterise thinking on genetic engineering and its possible results. On the one hand, we encounter an unfavourable approach represented by, among others, Francis Fukuyama. As he argues, the manipulation of the human genome to reach a specific purpose – no matter what kind of purpose, therapeutic or guided towards enhancement that has no curative aim – should not take place at all. According to him, aiming for genetic enhancement presupposes a destabilisation of what should remain untouched: "a human essence" that, for Fukuyama, renders the human race unique.[64] Aiming to modify some characteristics with the help of biotechnology poses a risk of challenging the already present uniqueness of humans; the uniqueness that for Fukuyama "entitles every member of the species to a higher moral status than the

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[62] Gregory Stock, *Redesigning Humans: Our Inevitable Genetic Future* (Boston: Houghton Mifflin Harcourt, 2002), 47.
[63] Steven Best and Douglas Kellner, "Biotechnology, Ethics and the Politics of Cloning," *Democracy and Nature* Vol. 8, No. 3 (2002), 455.
[64] Francis Fukuyama, "Transhumanism," *Foreign Policy,* October 23, 2009, https://foreignpolicy.com/2009/10/23/transhumanism/ (accessed May 12, 2022).

rest of the natural world."[65] Following this line of reasoning, what is believed to make humans human and to render their identity human should remain untouched as it is already pristine. What seems to render such a line of reasoning troubling is its incredible anthropocentrism and a lack of clarity regarding what the notion of human essence signifies. Fukuyama's thinking reminds of Nancy's notion of the intruder. Fukuyama thinks of the technology of genetic engineering as carrying a far too great potential to become intimate with the notion of being human. For him, the idea of what being human means and brings is perfectly stabilized, pristine and in no need of change. Therefore, the notion of technology causing even slight changes to that idea signifies for him a form of intrusion upon the already known – supposedly – notion of being human.

Here I can start thinking more with Rosi Braidotti and her notion of the unit of reference. She stresses that over the course of centuries the image of "Man as a rational animal" has become the dominant basis on which the notion of how humans connect to their environment formed.[66] Human, in this line of reasoning, is not at all an all-inclusive term, though: as Braidotti writes, human is a "He: the classical ideal of 'Man,' formulated first by Protagoras as 'the measure of all things,'" a white man.[67] Barad's thinking further adds to these assertions. As they write:

> Man is the center around which the world turns. Man is the sun, the nucleus, the fulcrum, the unifying force, the glue that holds it all together. Man is an individual apart from all the rest. And it is this very distinction that bestows on him the inheritance of distance, a place from which to reflect – on the world, his fellow man, and himself. A distinct individual, the unit of all measure, finitude made flesh, his separateness is key.[68]

Seeing oneself as such, very much flattering oneself, Man as a unit of reference has been gathering momentum. By promoting a "self-centred attitude" and defining itself upon what it is and what it is not,

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[65] Francis Fukuyama, *Our Posthuman Future: Consequences of the Biotechnology Revolution* (New York: Farrar, Strauss and Giroux, 2002), 160.
[66] Braidotti, *Posthuman*, 143.
[67] Ibid., 13.
[68] Barad, *Meeting the Universe Halfway*, 134.

it gave birth to a hierarchy, the top of which was occupied by nothing else but this very Man.[69] I see what Fukuyama brings with the idea of "human essence" as continuing and supporting the line of reasoning that Braidotti and Barad address and oppose. Endowed with essence, with something intrinsic, finite, being always already there, and indispensably determining what that something is, the notion of human turns into the only one that is worthy of note when Fukuyama thinks about genetic engineering. The emerging technology is approached by him as intrinsically evil, based predominantly on the interpretation that it carries the potential of causing the slightest change to human uniqueness and separateness. As that uniqueness, the essence that the human embodies is seen by Fukuyama as immaculate and to remain untouched, he finds it challenging to approach the notion of a change to it in a way otherwise than suspicious and wary.

In response to Fukuyama's perspective, I find Robert Zwijnenberg's approach incredibly supportive and illuminating. As he admits, what Fukuyama brings with the notion of human essence is imbued with "vagueness and ambiguity."[70] That comes from the fact that Fukuyama's thinking, all in all, develops upon the question of "what it means to be human;" as finding a clear and definitive answer to that question is close to impossible, working with it as a main unit of reference is what I argue we should be more aware of. [71] If the notion that humans are intrinsically superior to all other entities on the planet – including technology – gets intertwined with such a unit of reference, developing a productive response to genetic engineering can face quite a probable failure. What I mean with productive in this context is aiming for interpretations that are not predominantly pessimistic and fear-filled, guided towards a one-dimensional answer. As humans are seen as superior, and their identity remains untouched, any potential relation with technology of any kind is already presupposed to be either straightforwardly useful or menacing; intrinsically, technology is a mere means to an end.

Thoughts introduced by Fukuyama do not provide us with the only available approach to genetic engineering. There also comes an opposing line of reasoning, bringing a far more optimistic touch to the

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[69] Ibid.
[70] Robert Zwijnenberg, "Biotechnology, Human Dignity and the Importance of Art," *Teoria* Vol. 1 (2014), 138.
[71] Zwijnenberg, "Biotechnology, Human Dignity and the Importance of Art," 138.

practice of genetic engineering. Represented by figures like Nick Bostrom, the so-called transhumanists embrace the idea of being able to manipulate the human genome as quite reassuring and supposed to provoke feelings of eagerness and excitement rather than fear. In fact, the possible feeling of anxiety is what transhumanists choose to leave behind in their musings on genetic engineering.[72] What thinking represented by figures like Bostrom alludes to is the notion that enhancement is a human right. For him, genetic engineering, principally, brings a perfect basis on which bodily and mental enhancement might come into realization. He sees this technology through the prism of this promise in particular. As he stresses, the notion of what it means to be human can signify something even grander if the process of genetic engineering is embraced as one allowing for ensuring a "longer lifespan, better memory, more control over emotions:" the idea of being human – still very much present – in this case includes contributing to the enhancement of one's strength, smartness, and happiness.[73] The notion of happiness feels particularly compelling in this context, as such an approach presupposes that the practice of genetic engineering will render an individual who decides to embrace it automatically happier. What such a line of reasoning presupposes is the interpretation that "the goal of enhancement is to make not only physically better humans but happier humans," as Mark Coeckelbergh points out.[74] However much more generous towards genetic engineering than one introduced by Fukuyama, this idea does not leave us with straightforward and definitive approaches to the practice. To start with, the notion of happiness feels to be highly individual and seeing the newly emerging technology as presupposed to result in making its users happier seems to simplify and instrumentalise its potential values and beliefs that it might also bring. I wish to think more with Coeckelbergh's thoughts here.

Approaching genetic engineering as supposed to be used merely for realising particular cravings can result in seeing the technology as a mere means to an end. If that is the case, and if we keep in mind Coeckelbergh's notion that genetic engineering can influence how we understand ourselves, then seeing

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[72] Nick Bostrom, "Transhumanism: The World's Most Dangerous Idea?" *Nick Bostrom*, 2004, https://www.nickbostrom.com/papers/dangerous.html (accessed May 12, 2022).
[73] Bostrom, "Transhumanism," 2004.
[74] Mark Coeckelbergh, "Cyborg Humanity and the Technologies of Human Enhancement," in *Philosophy: Technology,* ed. Anthony Beavers (Macmillan Reference USA, 2017), 141.

that technology through the prism of the pursuit of individual happiness might not result in anything more promising compared to Fukuyama's thoughts.[75] Actually, I find Coeckelbergh's further thinking on the topic crucial for my analysis. As he points out, perspectives introduced by both transhumanists as well as the so-called "bioconservatives" (Fukuyama) are filled with simplifying assumptions about the technology.[76] To start with, both turn out to approach the body as something that an individual merely has and not is. By seeing the body as something to be enhanced to realise a particular purpose, such approaches render it a "mere instrument" that allows the mind to be carried around.[77] Technology in such a line of reasoning automatically turns into an instrument as well, something external and something merely possessed rather than lived with. Genetic engineering, following Coeckelbergh's reaction to this thinking, is not considered as carrying agency to influence ways how we think of ourselves and of the world – as always already entangled with different technologies that, in fact, allow us to go about our lives in ways that would not be possible if they had not been the case[78] – but it is merely out there to "serve" human cravings.[79] Alongside this reasoning, I want to make us aware of another argument that Coeckelbergh shares, which provides an incredibly illuminating possibility of rethinking the notion of human essence or what makes humans human.

Coeckelbergh writes: "transhumanists argue that we should eradicate human vulnerability by getting rid of disease and even death, whereas opponents seem to argue that we should accept human vulnerability as it is," therefore presupposing that this vulnerability has always been constant and should remain as such.[80] By bringing the notion of vulnerability, Coeckelbergh gives us an enlightening approach to the troublesome idea of a stable state of being human. I also believe that his take is compelling to link with the notion of Man as a separate individual seeing itself as a unit of reference, as

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[75] Mark Coeckelbergh, "Enhancement and the vulnerable body: Questioning some philosophical assumptions," in *Beyond Therapy v. Enhancement? Multidisciplinary analyses of a heated debate,* eds. Federica Lucivero and Anton Vedder (Pisa: Pisa University Press, 2013), 15-26.
[76] Mark Coeckelbergh, *Human Being @ Risk: Enhancement, Technology, and the Evaluation of Vulnerability Transformations* (Dordrecht: Springer, 2013), 20.
[77] Coeckelbergh, "Enhancement and the vulnerable body," 18.
[78] Nikki Sullivan, "Somatechnics, or Monstrosity Unbound," *Scan | Journal of Media Arts Culture* Vol. 3, No. 3, (2006).
[79] Mark Coeckelbergh, "Vulnerable Cyborgs: Learning to Live with our Dragons," *Journal of Evolution and Technology* Vol. 22, No. 1 (2011), 1-9.
[80] Coeckelbergh, "Enhancement and the vulnerable body," 21.

addressed by Braidotti and Barad. Being vulnerable is highly relational and ever-changing. It never remains the same as we are coming in contact with different individuals who cause different vulnerabilities to surface; upon entering a different environment and society we become vulnerable in yet new ways; and, most importantly in the context of my discussion, with new technologies the understanding of vulnerability broadens as well.[81] The only possibility of getting rid of vulnerability would signify the creation of a being existing in complete isolation from the world. Our vulnerabilities, therefore, make us who we are; they have always been there; although, they are not what simplifying takes on human enhancement suppose, as they are neither stable nor given. They might bring new misfortunes, although they are certainly nothing to be repulsed by as it is also thanks to them that we are thinking with the world, that we are becoming literate on what we encounter. What I see as intriguing here is that the notion of Man as a unit of reference that is finite and separate can be looked at through the prism of the notion of vulnerability.

The separateness of Man and the notion of "human essence" that emerges alongside support the idea that vulnerability is not meaningful for the question of how we are making sense of what we encounter.[82] Being vulnerable is a process of constant change; arguing that vulnerability should disappear or that it should stay intact further reinforces the idea that an unchangeable Man is a notion upon which we develop our literacies. If vulnerability, seen as supposed to either vanish entirely or remain untouched, becomes yet another notion through the prism of which the technology of genetic engineering is seen, literacy on that very technology will continue to form upon the already present dichotomous considerations. Adding to that, and as I already pointed out thanks to Coeckelbergh, the discourse around the emerging technology includes the notion of happiness. This notion, apparently, links closely to the very much troubled understanding of vulnerability. I infer that such a way of reasoning has influenced the belief that researching the process of genetic engineering "is a moral necessity," as refraining from it connotes responsibility for not having taken care of genetic conditions

[81] Coeckelbergh, "Vulnerable Cyborgs," 3.
[82] Fukuyama, "Transhumanism."

that could have been avoided; it connotes vulnerabilities and lack of happiness that could have been avoided.[83] Such an argument haunts us, those asked to partake in the thinking process on genetic engineering.

For the time being, what we can infer based on the two dichotomous interpretations of genetic engineering introduced in this section is the notion that the practice is presupposed to ask us only one question: should we embrace it or not? What I find distressing is that arguments brought both by Fukuyama and by Bostrom pose that there is nothing in between involved in this question. Genetic engineering, in these interpretations, is either a benefit or a threat to the human identity: there is nothing in between. I hold that if, alongside that simplifying question influenced by the dichotomous interpretations, we ever encounter the thought that genetic engineering is inevitable, our thinking process will certainly not be aided.[84] What I trust can allow us to start looking for respite in this thinking process is coming closer to this notion of looking for something in between the straightforward interpretations; embracing the more ambiguous, uncertain, and indefinite.

I do not have in mind an outlook guided towards a form of a complete lack of certainty regarding what might result from the technology of genetic engineering. Rather, I propose looking for a more subtle, observant, and open-minded approach; one that would allow for thinking of new perspectives on who we are in the discussions on the technology. I stand here with Braidotti when she writes that we need to "explore ways of engaging affirmatively with the present, accounting for some of its features in a manner that is empirically grounded without being reductive and remains critical while avoiding negativity."[85] What we need is a posthuman approach. What we need are alternative ways of thinking and making sense of. What we need is to go beyond seeing the stable Man as a unit of reference. What we need is a new literacy, one that would allow us to devise new ways of "subject formation," ways of thinking "differently about ourselves," of subjectivity.[86] What we need is a new unit

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[83] Jennifer A. Doudna and Samuel H. Sternberg, *A Crack in Creation: Gene Editing and the Unthinkable Power to Control Evolution* (Boston: Houghton Mifflin Harcourt, 2017), 218.
[84] Stock, *Redesigning Humans*, 47.
[85] Braidotti, *The Posthuman*, 5.
[86] Ibid., 12.

of reference upon which we might start reinventing our subjectivity. This new unit of reference that I propose here is the wound.

We will find the wound if we look for it

We need to remind ourselves that we are now living in a particularly significant moment for the notion of engaging with the technology of genetic engineering. It counts to refer back to the discussions, interpretations and approaches towards this technology's potential as we welcome the tool of CRISPR to our reality. As it turns out, the idea of being able to cause changes to genetic material, even though it has been with us for almost fifty years, has not been simplified or clarified. Questions that have been asked in the past, including both demonising and affirmative interpretations of genetic engineering, feel even more relevant to remember nowadays. Thoughts that the Asilomar Conference engaged with have only become more burning. As CRISPR turns out to be so easy to use, the perspective of "human clones, designer babies, genetic inequity and eugenics" is emerging alongside its nevertheless promising benefits.[87] The tool can bring us unbelievably closer to finding a cure to life-threatening genetic disorders and illnesses (like cancer[88] or sickle cell anaemia[89]); however, it simultaneously asks us questions that are certainly not simple to answer. One of such questions, following David Cyranoski and Sara Reardon, concerns the notion of whether changes in genes should be made heritable. As they argue, an affirmative answer to this doubt could have "an unpredictable effect on future generations" as, at this point, there is still a lot to be researched on the topic.[90] Even with this great deal of uncertainty in mind, alarmed and anxious thoughts are still gathering momentum and the upper hand within the discourse on genetic engineering.

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[87] Christine Critchley et al., "Predicting Public Attitudes Toward Gene Editing of Germlines: The Impact of Moral and Hereditary Concern in Human and Animal Applications," *Frontiers in Genetics* Vol. 9 (2019), 2.
[88] Synthego, "CRISPR Cancer Research," *Synthego*, https://www.synthego.com/crispr-cancer (accessed July 8, 2022).
[89] Synthego, "Sickle Cell Gene Therapy Using CRISPR," *Synthego*, https://www.synthego.com/crispr-sickle-cell-disease (accessed July 8, 2022).
[90] David Cyranoski and Sara Reardon, "Chinese scientists genetically modify human embryos," *Nature,* April 22, 2015, https://www.nature.com/articles/nature.2015.17378 (accessed May 14, 2022).

The emerging technology asks us – those working with it professionally and those wondering about it but having no professional background – questions that prove incredibly troublesome and delicate to approach. We might be able to get rid of hazardous genetic diseases. However, we might also cause havoc of yet unknown consequences. Hearing professionals in the field of biotechnology ask for a moratorium on the one hand and, on the other, urging for a "pathway forward" is only making the matter more convoluted.[91] It feels that the discussions on the potential of genetic engineering are moving in circles and remain dichotomous. A genuine debate, following Donna Dickenson and Marcy Darnovsky, will require going beyond the interpretations that I have focused on in this chapter; those in favour of genetic engineering would need to stop labelling those against the process as "scientific know-nothings who are simply fearful of dystopias and 'designer babies.'"[92] Indeed, what is needed then is an approach that would welcome something more than straightforward interpretations of the developing technology, one that would go beyond the simplifying and instrumentalising understanding of the practice.

Calls for public engagement in the discussion on the topic are facing us in a particularly troubling way. Apparently, very little is currently known "about lay perceptions of gene editing," and the research on the topic is "in its infancy."[93] Does that mean that we are entirely oblivious to the developing technology? I argue that not at all: we have already been haunted by either demonising or overly favourable interpretations. I claim that what is needed is an approach to the practice of genetic engineering as not intrinsically evil or dangerous, as a mere means to an end, but rather as wounded. This practice turns out to be wounded as it makes us face questions that are, for the time being at least, quite impossible to answer. It is wounded as its interpretations prove to provide the public with ways of thinking that are chiefly demonising or far too straightforwardly affirmative. Such approaches to the practice feel to hamper our will to think for ourselves without constantly trying to find *the* answer to the

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[91] Françoise Baylis, "Human Genome Editing: Our Future Belongs to All of Us," *Issues in Science and Technology* Vol. 35, No. 3 (2019), 43.
[92] Donna Dickenson and Marcy Darnovsky, "Did a permissive scientific culture encourage the 'CRISPR babies' experiment?" *Nature Biotechnology* Vol. 37 (2019), 357.
[93] Critchley et al., "Predicting Public Attitudes," 3-4.

questions that might emerge. Genetic engineering feels wounded as it constantly turns out that we do not know enough about it. Interpretations that constitute the discourse on the topic, as introduced in this chapter, are like a burden we are forced to carry. Suppose we are willing to know more about the topic. In that case, our desire might seem unrealisable as the language with which the practice of genetic engineering is predominantly addressed is incredibly nebulous.[94]

What I see as necessary is a more compassionate approach to genetic engineering. What is at stake is trying to develop a new form of literacy that would enable us to engage with the question of how we might change our ways of relating to this technology: ways that would not be running on the notion that the human body is an autonomous entity in the process of genetic manipulation, constantly remaining on the top of the hierarchy, using the technology as a mere instrument, and remaining separate from its environment.[95] We need a new form of literacy upon which we will be able to reinvent our subjectivity within the discourse of genetic engineering. Now is the right time to think about this technology not merely through the prism of what is approved about it and what is not. Rather, we should look at it through the prism of its woundedness. I see the technology of genetic engineering as delicate and to be cared for, as asking for a posthuman performative touch rather than dangerous and threatening. It is not intrinsically dangerous or evil but wounded.

In this essay, I see the concept of the wound as one upon which new relations can emerge, finding inspiration in the writing of Joë Bousquet and its interpretations. Shot in the spine during the first World War at the age of only 21, he spent the rest of his life bed-bound, committing himself to write poetry. His work inspired Gilles Deleuze, for whom it was "in its entirety a meditation on the wound."[96] A sentence that Deleuze finds particularly captivating in Bousquet brings the following: "My wound existed before me, I was born to embody it."[97] The concept of the wound, in this case, goes beyond its simple understanding of a bodily injury, some sort of irritating deficiency that renders one

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[94] Doudna and Sternberg, *A Crack in Creation*, 236.
[95] Agnieszka Anna Wołodźko, "Bodies within Affect: On Practicing Contaminating Matters through Bioart" (PhD diss., Leiden University, 2018), 29.
[96] Deleuze, *The Logic of Sense*, 348.
[97] Ibid., 148.

temporarily – or permanently as it was for Bousquet – unable to carry on with one's daily activities. Not at all: it becomes a momentum upon which a process of forming subjectivity unfolds.

The wound is not only that which has occurred – a bullet hitting the spine and thus causing trauma – but rather is an attribute that one dons as a result of perceiving something momentous and meaningful "*in* that which occurs."[98] The wound for Bousquet, in the words of Rocco Ronchi responding to Deleuze's reaction to the poet's writing, is what makes him who he is; it brings him away "from being a presupposed substance" towards being "an effect of the event."[99] The event – which is the wound – is that which turns into a carrier of momentum that makes Bousquet form his subjectivity. And as subjectivity, to borrow from Deleuze, is "defined by the movement through which it is developed," that very movement – that which happens, the wound – needs to be accepted and embraced in the first place if it is to become that upon which a subject develops.[100]

That which happened – the bullet hitting Bousquet's spine – turns into an incident that the poet-to-be can either resent or embrace. By opting for acceptance, he is not approaching his wound as repugnant but, on the contrary, becomes "worthy of what happens" to him, as Deleuze calls it.[101] Being worthy of the event that takes place means to "*include* (to appropriate) that which, by *inflecting* us (the wound), makes us what we are (the wounded poet)," as Ronchi writes.[102] Not being worthy of what occurs, hence, means seeing "whatever happens as unjust and unwarranted (it is always someone else's fault)," which, consequently, renders woundedness abominable.[103] Resenting what happens, resenting the wound and what it brings implies refusing to become otherwise.

The notion of becoming otherwise is another one that I hold dear in my reading. I find inspiration in Deleuze's approach to the notion, for whom becoming "is the affirmation of the positivity

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[98] Ibid., 149. Emphasis in original.
[99] Rocco Ronchi, "The Wounded Poet: On the Twenty-First Series of Deleuze's *Logic of Sense,"* in *The Wounded Body: Memory, Language and the Self from Petrarch to Shakespeare,* ed. Fabrizio Bondi, Massimo Stella, and Andrea Torre (Cham: Palgrave Macmillan, 2022), 13.
[100] Gilles Deleuze, *Empiricism and Subjectivity: An Essay on Hume's Theory of Human Nature* [1953] (New York: Columbia University Press, 1991), 85.
[101] Deleuze, *The Logic of Sense,* 149.
[102] Ronchi, "The Wounded Poet," 14. Emphasis in original.
[103] Deleuze, *The Logic of Sense,* 149.

of difference, meant as a multiple and constant process of transformation," as Braidotti puts it.[104] Becoming eschews the development of finite and separate identities but rather, as a concept, allows for attentiveness to "change, flight or movement within an assemblage;" within an event that happens.[105] Becoming is a process that generates new ways of existing and subject formation; it allows for thinking otherwise about who one is. Becoming otherwise is about affirming that one's subjectivity is never fixed; it is about being constantly attentive to what happens and seeing it as providing chances for transformation. Bousquet, after having decided to embrace the wound, with full confidence declares the following: "Become the man of your misfortunes; learn to embody their perfection and brilliance."[106] For him, the wound is that which affords him a chance to become otherwise. The wound is not turning into a tyrant for him as he shows no signs of bitterness towards it. As he reinvents his subjectivity alongside his woundedness, he becomes a subject worthy of his present.[107]

The wound, in this sense, turns into an incredibly productive concept in my essay as it allows for new relations and ways of becoming otherwise upon what we encounter to emerge.[108] To become otherwise means for me going beyond the idea of being repulsed by emerging technology as it might cause changes to the world as we know it. As Jason Cullen points out in his reaction to Deleuze's take on Bousquet's writing, wounds can be seen as occurrences that cause a rupture to the world as an individual knows it.[109] Such a rupture provokes a feeling of uncertainty on the one hand while, on the other hand, becomes potentially empowering as it "disrupts the belief in an individual's separateness from the world," thus rendering it conceivable to go beyond the notion of seeing the human as a unit that has all the control in the world around.[110] If we manage to go beyond such a notion, we might feel

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[104] Rosi Braidotti, "Discontinuous Becomings. Deleuze on the Becoming-Woman of Philosophy," *Journal of the British Society for Phenomenology* Vol. 24, No. 1 (1993), 44.
[105] Robbert Wilmink et al., "Becoming," *The Human Geography Knowledge Base*, last modified on November 3, 2011, http://geography.ruhosting.nl/geography/index.php?title=Gilles_Deleuze#Becoming (accessed July 5, 2022).
[106] Deleuze, *The Logic of Sense,* 149.
[107] Braidotti, *The Posthuman*, 52.
[108] Gregory J. Seigworth and Melissa Gregg, "An Inventory of Shimmers," in *The Affect Theory Reader,* ed. Gregory J. Seigworth and Melissa Gregg (Durham: Duke University Press, 2010), 3.
[109] Jason Cullen, "The Wounds of Indetermination: Deleuze, *Cinema* and Ethology" (PhD diss., The University of Queensland, 2013), 44.
[110] Cullen, "The Wounds of Indetermination," 44.

more embedded in what happens around us and become more affirmative of events we encounter. The wound can grow into a carrier of potential to support one's ability to become with the world, take part in it, and respond to it without turning reductive, bitter, or negative. In case of encountering a misfortune of any kind, we might see it as a wound in Bousquet's sense; to bolster our ability to think otherwise about what has been putting us in a state of uncertainty, concern, or distrust.

Here I refer back to what I focused on in this chapter. All the interpretations that the merely developing technology of genetic engineering has resulted in, all the outlooks filled with a great deal of suspicion that hamper and suffocate ways of interpreting otherwise, should not be seen as "unjust and unwarranted" from our point of view, those asked to think about that technology.[111] I argue that these interpretations can be seen as wounds that we have been, are, and will be embodying, resulting in what I call wounded literacy. As the misfortune that happened to Bousquet was embraced by him as a wound that he found empowering and upon which he became otherwise – as he turned into a poet – we can say that we can become those who embody the wounded literacy that the approaches to genetic engineering are affording us. A particular way of making sense of the technology –literacy – if seen as wounded, can allow us to become more alert, compassionate, and creative to what is already there in the form of interpretations preferring one-dimensional reading of that technology. Thanks to Bleeker, I developed the concept of wounded literacy as a conceptual and analytical tool that can shed light on and can direct our attention to the sedimented interpretations of the emerging technology. Thanks to Bousquet, I see it as an attribute we can don to become otherwise by approaching those unfortunate interpretations as nothing to be bitter about.

Already present approaches to genetic engineering should not repulse us. They are particular misfortunes, wounds that we are now starting to live to an even greater extent with the advent of CRISPR. We should remember what Rick Dolphijn stresses in response to Bousquet's wound: "there is nothing personal" about the wound; it does not belong to any specific individual and to this individual

[111] Deleuze, *The Logic of Sense,* 149.

only.[112] Wounds are always part of life – of any life – but they are never to be chosen. They will never turn into companions as we cannot choose them. Nevertheless, they always have been, are, and will be there. They might not be visible in one situation, but they will undoubtedly emerge in another. They are surfacing now as we are slowly welcoming CRISPR. We can see that we have always been, and always are, wounded in one way or another. The awareness of that vulnerability comes to us when the right time arrives. This awareness might happen upon encountering the other – a human, a nonhuman, an event – on which the wound realises itself and stresses that it is "always a shared wound."[113] If it is shared, it does not affect only one or the other; it affects both in unison. In this matter, we are never alone when the wound renders itself visible. We become otherwise – provided that we accept what happens – through the relation that we enter, one that we can see as offering a chance to connect and find respite in one another.

If we see the wound as our new unit of reference, we can start developing a new subjectivity: a posthuman subjectivity as Braidotti calls it.[114] As she writes, such a subjectivity forms upon relationality and is "constituted in and by multiplicity, […] works across differences and is also internally differentiated, but still grounded and accountable."[115] It emerges from becoming, from constantly becoming otherwise, as it remains accountable for the present in which it finds itself; its accountability is "embodied and embedded" in all the events and relations it becomes part of.[116] A posthuman subject holds itself accountable for the wound as it embraces it and accepts it as a new unit of reference. With Braidotti and Barad, I will propose a notion of a posthuman performative subjectivity that can emerge thanks to woundedness. For now, we should pay attention back to how we have already been developing our wounded literacy of, and subjectivity of, genetic engineering alongside science fiction cinema.

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[112] Rick Dolphijn, *The Philosophy of Matter: A Meditation* (London: Bloomsbury Academic, 2021), 91.
[113] Dolphijn, *The Philosophy of Matter*, 92.
[114] Rosi Braidotti, "Posthuman Critical Theory," in Critical Posthumanism and Planetary Futures, eds. Debashish Banerji and Makarand R. Paranjape (Springer, 2016), 19.
[115] Braidotti, *The Posthuman*, 49.
[116] Ibid.

Chapter 2

Seeing it as distressing is how we

render it wounded: on science fiction film

We are already wounded, but we should not despair

If we are to start becoming otherwise alongside the wound as our new unit of reference, and if we are to become more alert to what kind of literacy we have been developing through coming in contact with science fiction (sci-fi) film, I find it crucial to first come back to one notion that I brought in the introductory chapter. According to Curtis D. Carbonell, *Blade Runner*, reinforces "the *need* for selves that are stable, understandable, redeemable."[117] Such a notion, above all, reasserts the idea of "human essence" as Fukuyama offers it, therefore presupposing that humans are entities that occupy the top of a hierarchical relationship that is forming alongside the emergence of the Replicant, an embodiment of what the technology of genetic engineering can bring.[118] As I stressed in the introduction, it is sci-fi cinema that provides a realm for thinking about emerging technologies and their possible social and ethical outcomes and, therefore, adds to the notion of how we are becoming literate on genetic engineering.

I argue that it counts to notice interpretations as Carbonell's and approach them not as unjust misfortunes that we encounter on our path towards building literacy but instead as wounds that can grow into carriers of potential to support our ability to think with genetic engineering without turning reductive, bitter, or negative. Those wounds are adding to the wounded literacy that we are already embodying as a result of what the Asilomar Conference gifted us with. It is crucial to notice them if we are to start becoming otherwise. Keeping my notion of wounded literacy in mind, it counts to delve into the question of how we can see ourselves – as those who watch sci-fi films, often or less often, for academic purposes and otherwise – as having developed as well as continuously developing a particular literacy based on them. To provide background for what is to come, I will focus on Vivian Sobchack's uniquely detailed, thorough, and meticulous analysis of sci-fi cinematography.[119] For now though, I will

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[117] Curtis D. Carbonell, "A Contest of Tropes: Screened Posthuman Subjectivities," in *The Palgrave Handbook of Posthumanism in Film and Television,* eds. Michael Hauskeller, Thomas D. Philbeck and Curtis D. Carbonell (London: Palgrave Macmillan, 2015), 156. Emphasis added.
[118] Fukuyama, "Transhumanism."
[119] Vivian Sobchack, *Screening Space: The American Science Fiction Film,* 2nd ed. (New Brunswick, New Jersey: Rutgers University Press, 2001).

provide a hint into what I will develop as a possibility of becoming otherwise in the form of a posthuman performative subjectivity. To do so, I turn to Braidotti and Barad.

The notion of yearning for stable selves makes me think of one distinction that Braidotti brings:

> Whereas identity is a bounded, ego-indexed habit of fixing and capitalizing on one's selfhood, subjectivity is a socially mediated process of relations and negotiations with multiple others and with multi-layered social structures.[120]

What I see that Braidotti brings here is an attempt at seeing one's way(s) of recognising one's awareness of presence in the world as not based on predetermined structures. One of such structures, a mighty one, sees the human as "the measure of all things," as the creature with a finite essence to which the whole world is inferior and subject to control.[121] With subjectivity comes something completely different: a relations-based process that can result in questions not asking "who am I and have always been?" but rather "who am I at this point?" This approach makes me think of Deleuze's understanding of subjectivity as "defined by the movement through which it is developed." [122] Relations and negotiations in Braidotti – the movement for Deleuze – is that which happens and needs to be accepted and embraced in the first place if it is to become that upon which a subject develops.

What can result from this escape from an identity-bound mode of awareness adds to Braidotti's posthuman subject.[123] As she writes, the notion allows for rejecting the idea of a stable human identity existing in a vacuum. It can be interpreted as a "composite assemblage of human, non-organic, machinic and other elements".[124] All those elements can be considered components of a subjectivity formed upon constantly becoming otherwise. The posthuman subject assembles itself when a body comes in contact

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[120] Rosi Braidotti, *Nomadic Theory: The Portable Rosi Braidotti* (New York: Columbia University Press, 2011), 4.
[121] Braidotti, *The Posthuman*, 13.
[122] Deleuze, *Empiricism and Subjectivity*, 85.
[123] Rosi Braidotti, "Posthuman Critical Theory," in *Critical Posthumanism and Planetary Futures,* eds. Debashish Banerji and Makarand R. Paranjape (Springer, 2016), 19.
[124] Braidotti, "Posthuman Critical Theory," 19.

with, and when it relates to, other bodies and events and starts to wonder about how it finds itself present in the world at the moment; how it understands its position in the world in terms of what it encounters; what it feels it is capable of doing as a result of such encounters; as well as how it recognises the world. The posthuman subject results from various encounters, happening relentlessly, that let it develop but never become definite. As it is with the wound, the posthuman subjectivity might provoke a feeling of uncertainty. However, it has an empowering potential as it "disrupts the belief in an individual's separateness from the world" to return to Cullen.[125] If one manages to embrace such a disruption, one might feel more embedded in what they encounter and might approach events that happen more affirmatively. As I communicated before, I propose an extension of the notion of posthuman subjectivity thanks to thinking with Barad. Let me specify what I mean by this to provide a more precise tie with my case studies.

In one of their writings, Barad shares the thought that "language has been granted too much power."[126] There is a clear reason for Barad to pay attention to language or to representationalism in the broad sense. Language has taken control of modes in which we make sense of the world. Anything encountered by humans, as those literate in the sense of language proficiency, be it an object, an event, or another individual, becomes a "matter of signification," as Barad calls it.[127] Words turn into agents deemed as the only ones with the power to grant notions that we encounter with significance. The subject of the processes of meaning-making based on language – the matter – is rendered passive as it is deemed to be only waiting to be granted agency thanks to language. Barad stresses that, as language clearly influences how we approach the world's ontology, we should become more aware of what that connotes. As they argue, the world's becoming should be seen as having a performative agency. With the notion of performativity, Barad offers us a perspective that allows for "a contestation of the unexamined habits of mind that grant language and other forms of representation more power in determining our

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125 Cullen, "The Wounds of Indetermination," 44.
126 Karen Barad, "Posthumanist Performativity: Toward an Understanding of How Matter Comes to Matter," *Signs* Vol. 28, No. 3 (2003), 801.
127 Ibid., 801.

ontologies than they deserve;" they offer us a new way of becoming with discursive practices that we encounter.[128] Barad's performative account challenges the representationalist notion of positioning the Man "above or outside the world" to let him reflect on the already finite world and instead insists on "understanding thinking, observing, and theorizing as practices of engagement with, and as part of, the world in which we have our being;" it insists on a constant becoming otherwise.[129]

Taking their musings further alongside their performative account, Barad offers their take on a posthuman approach – one that I find particularly compelling to think with when keeping Braidotti's thoughts in mind. As Barad writes:

> Posthumanism, as I intend here, is not calibrated to the human; on the contrary, it is about taking issue with human exceptionalism while being accountable for the role we play in the differential constitution and differential positioning of the human among other creatures (both living and nonliving). […] Posthumanism does not presume that man is the measure of all things. It is not held captive to the distance scale of the human but rather attentive to the practices by which scale is produced.[130]

Barad's approach perfectly fits the results of the mapping I engaged in throughout the previous chapter. Interpretations of genetic engineering and what might come with it prove to treat the notion of "what it means to be human" as their unit of reference.[131] They seethe with human exceptionalism, however they do not feel to hold themselves accountable for such an approach. As introduced by Barad as well as by Braidotti, a posthuman approach allows for becoming "worthy of the present" by thinking of a new type of subjectivity that does not see the Man as this unifying and powerful force.[132]

Thinking further with Barad, we find out that they offer us an approach that sees reality not as having predetermined attributes, but rather as consisting of practices or what they call, after Niels Bohr,

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[128] Barad, *Meeting the Universe Halfway*, 133.
[129] Ibid.
[130] Ibid., 136.
[131] Zwijnenberg, "Biotechnology, Human Dignity and the Importance of Art," 138.
[132] Braidotti, *The Posthuman*, 52.

"phenomena."[133] It is phenomena that compose reality; therefore, they can be understood as "ontologically primitive relations;" they are encounters that emerge and consist of different components: human, nonhuman, events, or concepts.[134] What phenomena emerge from are "intra-actions" between components that are part of those phenomena. As interaction presupposes that agencies that become part of it are already finite and unshakable, Barad's intra-action allows for noticing that agencies emerge through entanglements that they become part of.[135] The phenomena provide their components with an agency or, to use the concept that I think with here, with subjectivity that becomes determinate and meaningful precisely through intra-actions within phenomena.

Barad links their take on two notions together and develops "a specifically posthumanist notion of performativity – one that incorporates important material and discursive, social and scientific, human and nonhuman, natural and cultural factors."[136] Inspired by the notion that language has been granted too much significance within the processes of meaning-making, Barad advocates a new way of thinking that challenges the givenness of matters we encounter. In such a line of reasoning, nothing is predetermined but earns agency thanks to becoming part of an assemblage, a phenomenon, a relation. I trust that Barad's take on language can find its counterpart in the notion of a stable human identity seen as a unit of reference. Based on my reading that has already taken place, I notice it crucial to link Barad's and Braidotti's musings together towards creating a concept of posthuman performative subjectivity.

As the world we live in is welcoming quite probably transformational developments with the advent of CRISPR, we need to "devise new social, ethical and discursive schemes of subject formation" to start thinking differently.[137] We need to remain both attentive as well as affirmative to the present that we are finding ourselves in; to move beyond the notion of Man as a unit of reference, we need to start thinking through relationality; we need to remain attentive to the discourses and literacies that we are embodying; what we need are intra-actions rather than interactions with the matters of genetic

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133 Barad, *Meeting the Universe Halfway*, 33.
134 Ibid., 139.
135 Barad, "Posthumanist Performativity," 815.
136 Ibid., 808.
137 Braidotti, *The Posthuman*, 12.

engineering. I assert that a specific posthuman performative subjectivity can be invented thanks to the wound. As we know from Bousquet, wounds can be embraced as perfect as brilliant, certainly not as abominable. It is upon the wound that one can move away from "being a presupposed substance."[138] Thanks to seeing misfortunes as wounds to be embodied, as parts of phenomena that we become part of, we can start reshaping our subjectivity. Suppose we see the wound as one upon which a new framework for identifying "common points of reference and values" can form. In that case, we can start inventing a subjectivity that has nothing to do with human exceptionalism, but that is based on engaging to become otherwise.[139] Becoming upon woundedness circumvents hierarchies and dichotomies as we are all – humans and nonhumans – wounded. I believe we are lucky in this regard: I will show that sci-fi film, thanks to which we are forming our subjectivity to genetic engineering, is wounded while we are already embodying wounded literacies. It is possible to start reinventing our subjectivity and move away from a bound identity formed on the Man as a unit of reference. In the following section, I will argue my other case for wounded literacy.

Losing control is what makes us literate

> If you were a regular viewer of science fiction films anytime from 1950s to the 1990s, you might have felt vulnerable just standing on Earth's surface.[140]

As I pointed out in the section above, I focus on Vivian Sobchack's analysis of sci-fi cinema to offer a background for what is to come. Her writing is concerned only with the American context applicable to the genre; this, however, will harmonise with the analyses of *Blade Runner* and *Gattaca,* which are, after all, instances of Hollywood cinema. As Sobchack points out, the poetics of sci-fi film – its "visual and aural

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138 Ronchi, "The Wounded Poet," 13.
139 Braidotti, *The Posthuman*, 196.
140 Sidney Perkowitz, *Hollywood Science: Movies, Science, and the End of the World* (New York: Columbia University Press, 2007), 49.

elements" – should be seen as carrying an important social and historical situatedness.[141] With that, she means that sci-fi cinema has always been mediating "new form[s] of cultural understanding," of new ways of thinking, relating to, and making sense of emerging technological developments.[142] Science fiction has always responded to and contributed to the cultural imagination of what the increasingly technological world feels to afford, and what changes it brings for the social being. In this sense, it has always been contributing to particular subjectivities and literacies of the newly emerging technological. This contribution has been taking place, following Sobchack, since the 1950s, when sci-fi became a critically acclaimed film genre. The 1950s was the time that brought science and technology to unprecedented advancement, especially concerning their military and industrial uses. The event of atomic bombs being dropped on Japan painfully became one that "shaped the predominant portrayal of science" in the cinema of that time, as David Kirby points out.[143] The approach towards science and technology as either safe or evil was mediated perfectly by two films that Sobchack finds crucial to set the tone for the beginnings of sci-fi's popularity and its limits. She does so based on considering them as having responded to a heightened "public recognition of the vast power and sociopolitical consequences of rapid advances in science and technology."[144]

The first film that Sobchack pays special attention to is *Destination Moon* (directed by Irving Pichel, 1950). Sharing a story of space travel to the Moon and back, the film introduced a story of an adventure with such an optimistic spirit that its prime message turned into one that "man and science and the machinery dependent on both could, indeed, conquer the stars."[145] At the moment when space travels to the Moon were not the case yet, the film showed great respect for and trust in the developing technology that would allow for a similar journey in space after nineteen years. *Destination Moon* has

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141 Sobchack, *Screening Space*, 8-12.
142 Ibid., 8.
143 David A. Kirby, "Science and Technology in Film: Themes and Representations," in *Routledge Handbook of Public Communication of Science and Technology,* eds. Massimiano Bucchi and Brian Trench (New York: Routledge, 2014), 97-112.
144 Vivian Sobchack, "American Science Fiction Film: An Overview," in *A Companion to Science Fiction,* ed. David Seed (Malden: Blackwell Publishing, 2005), 262-263.
145 Sobchack, *Screening Space*, 22.

contributed an optimistic and uplifting tone to the beginnings of sci-fi cinematography, placing much trust in the potential visualisation of future space travels and trusting them to be achievable.

Alongside this uplifting tone, Sobchack focuses on another film which, contradictorily, contributed to a purely pessimistic dramatisation of an unknown, alien, or creature. *The Thing* (Christian Nyby/Howard Hawks, 1951) presented a visualisation of a vicious creature which, after having assumed a human form, would attack people and provoke fear. Sobchack sees the unknown creature introduced in the film as one the audiences could only be afraid of. In her words, the second motion picture has introduced a "profear" as well as "antiscience and antiscientists" touch to the visions of a potential future. [146] At the time of the film's release, those visions were not only focused on generating imaginary views on advancing technology but were also entrenched in the feeling of fear provoked by a risk of a nuclear catastrophe. Notably, *The Thing* envisioned the figure of a scientist as "foolishly curious," characterised by an "abnormal desire for knowledge" supposed to pose an enormous threat to the human race.[147] The dramatisation of scientific approaches was apparent to lead the film's audiences to develop an understanding of those as inherently running on and towards madness and villainy.

However delimiting, this representation of a scientist has turned out to be interpreted as prime to follow when it came to developing a public understanding of the topic. As Christopher Frayling points out, a "gap between specialized knowledge and public understanding" has gathered momentum alongside sci-fi cinematic pieces inspired by scientific and technological developments.[148] That gap, quite unfortunately, has turned out to be consistently filled by stereotypical takes on the figure of an individual that embodies what science and technology can bring.[149] To come back to Sobchack, even though *Destination Moon* was released first, it was what *The Thing* brought that led to the formulation of a thesis that sci-fi cinema brings films that are predominantly antiscientific.[150] Apparently, the notion of a scientist and all the novelty that he – as it is a 'he' and not a 'she' that turns out to emerge in the

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146 Ibid., 23.
147 Ibid.
148 Christopher Frayling, *Mad, Bad and Dangerous? The Scientist and the Cinema* (London: Reaktion Books, 2005), 11.
149 Frayling, *Mad, Bad and Dangerous?*, 11.
150 Sobchack, *Screening Space*, 22.

discussions on the topic – introduces is seen in the context of sci-fi cinema in a rather ominous way.[151] The scientist is imagined as predominantly involved in his work to such a degree that he loses track of what happens around him. Disconnected from what happens, such an imaginary outlook on the figure of the scientist becomes a trope that evolves and realises itself in different ways but never disappears. The cinematic scientist becomes a mad figure who has turned out to be so much "ingrained in modern thought, that you almost don't notice he is there."[152] As a wound, it realizes itself in different forms, as we will see in the upcoming analysis of *Blade Runner*. For now, I want us to remain aware that the tropes that have marked a dual nature of approaches to science and newly emerging technological advancements followed the gloomy outlook. As Sobchack points out, the "pro-fear" and "anti-science" interpretations have emerged as dominant in writings on sci-fi cinema.[153]

Such a delimiting interpretation of the works belonging to the genre might seem like a perfectly natural outlook to develop. After all, films that started to emerge from the 1950s onwards provided quite catchy and dramatic responses to technological developments applicable to a given moment in time. As Sidney Perkowitz underlines, the realm of sci-fi cinema has always responded both to hopes as well as to fears and worries that came with every decade.[154] All those feelings resulted from newly emerging technological advancements, happenings that have always carried a remarkable agency to grasp public attention.[155] As Perkowitz puts it, sci-fi cinema has been gradually providing its audiences with themes addressing the question of what is a potential danger for humanity, above all: "alien life, catastrophes from space, catastrophes from the Earth's own processes, nuclear science, disease and genetic manipulation, and robots and computers."[156] Depending on a particular moment, each theme followed the other, while tropes and fears have been gradually sedimenting. Concerns resulting from more external dangers – such as alien invasion or nuclear disaster – were joined by those imagined to be

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[151] Frayling, *Mad, Bad and Dangerous?*, 13-14.
[152] David Skal in Frayling, *Mad, Bad and Dangerous?*, 46.
[153] Sobchack, *Screening Space*, 23.
[154] Perkowitz, *Hollywood Science*, 3-16.
[155] Elana Gomel, "Science (Fiction) and Posthuman Ethics: Redefining the Human," *The European Legacy* Vol. 16, No. 3 (2011): 339-354.
[156] Perkowitz, *Hollywood Science*, 16.

brought by something more intimate, believed to emerge alongside the Internet, advancements in biotechnology, and the development of artificial intelligence and robotics.

From the fear that might have come from above – as *The Thing* bid its audiences goodbye by saying "Keep watching the skies"[157] – feelings of threat were gradually becoming more and more varied. They started to be considered as concerning "qualities seen as essential to the human being: subjectivity, memory, personal identity, privacy, and agency."[158] As is the case for the notion of "human essence" emerging in discussions on genetic engineering, it turns out that responses to sci-fi cinema add another layer to the wounded literacy.[159] What sci-fi cinema proves to have been gradually turning out to "gift" its audiences with were outlooks on "the evils of science," imagining newly emerging technological developments and scientists' endeavours to result in a catastrophe.[160] Watching sci-fi films, right from the emergence of the genre, is what Perkowitz argues would undeniably be a valid reason for having nightmares in which one would be surrounded by figures or events that could do anything to cause havoc to the familiar and well-organised human world.[161] What I find particularly compelling is the fact that the "profear" and "antiscientific" tropes in sci-fi films have managed to remain so prominent and turned out to do quite well up until the late 1990s as well.[162] Indeed, as Kathrin Klohs argues, the tropes that contributed to the cinematic idea of science and technology as evil "have remained relatively unchanged," which means that they also very much concern films like *Blade Runner* and *Gattaca.*[163] Upon finding this out, I wondered: is there no other way of becoming with sci-fi film? Indeed, the notion of posthumanism emerges in discussions reacting to this cinematic genre. Nevertheless, I do not see it as affirmative. It is necessary to investigate what kind of "posthuman literacy" on the topic we already have. It is also necessary to see it as wounded if we choose to become otherwise.

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157 Sobchack, *Screening Space*, 23.
158 Sobchack, "American Science Fiction Film," 272.
159 Fukuyama, "Transhumanism."
160 Perkowitz, *Hollywood Science*, 202.
161 Ibid., 142.
162 Sobchack, *Screening Space*, 23.
163 Kathrin Klohs, "More Human than Human! How Recent Hollywood Films Depict Enhancement Technologies — And Why," in *The Human Enhancement Debate and Disability: New Bodies for a Better Life*, eds. Miriam Eilers, Katrin Grüber, and Christoph Rehmann-Sutter (London: Palgrave Macmillan UK, 2014), 187.

The wounded posthuman

Sci-fi cinematography has managed to develop itself a label of being a proponent of fearful approaches to the novelties that science brings and can bring. As the "pro-fear" and "anti-science" tropes have been gradually sedimenting throughout the 1950s until the 1990s, those who have been coming in contact with them were certainly not letting them go unnoticed.[164] Pessimistic, paranoid even, cinematic takes on scientific and technological advancements have been – and still are – affording specific ways of making sense of the world, responding to it, and interpreting it. I argue that surrounding oneself with sci-fi films imagining a catastrophic future of the Earth or humanity was gradually turning into a wounded literacy towards not only sci-fi film but also towards technologies and science that are its momentum. Having emerged in the 1970s, genetic engineering technology provides an equally distressing environment for another share of paranoid interpretations.[165] The following section will therefore focus on responses to cinematic pieces that touch upon the topic of genetic engineering. My exploration will particularly delve into those analyses that include the notion of posthuman.

With every trope emerging – be it an alien invasion believed to annihilate humanity or emerging computer technology believed to eradicate human understanding of consciousness – sci-fi film has been showing us an unknown world that our thinking cannot comprehend. The uncertainties, the fears, and the alleged threats brought with sci-fi cinematography, before hidden, are regularly surfacing. All that has been steadily turning into what we are scared of simply because sci-fi started to show that "something is about to happen that will destroy everything as we now know it."[166] The genre started to imagine a world that we have never encountered before. The misfortunes in the form of distressing appearances of imaginary worlds, all the challenging although inventive outlooks on the world that might come, seem to have been approached with suspicion and grudge. Even though a long time has passed, we are now

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[164] Sobchack, *Screening Space*, 23.
[165] Jackie Stacey, *The Cinematic Life of the Gene* (Durham: Duke University Press, 2010).
[166] Rick Dolphijn, "The Cracks of the Contemporary," in Vanina Hofman and Pau Alsina, "Art and speculative futures," *Artnodes* No. 19 (2017), 17.

living the moment when these misfortunes and wounds are still preferred to be approached as "unjust and unwarranted," especially when the notion of posthuman emerges.[167]

I start my discussion here with a view that I find particularly sharp and bold. Focusing on sci-fi films made from the 1970s onwards, Karwande argues that the theme of "obsession in which humanity is depicted as under threat from sociological, ecological or technological adversaries of its own creation" has started to gather momentum.[168] As the author stresses, films that followed – including *Blade Runner* and *Gattaca* – have started to develop "the theme of technophobia" that reminds us of the trope of science as evil.[169] Through bringing the notion of technophobia, Karwande demonstrates that sci-fi cinema is devoted to painting "a repulsive picture of a future world where technology runs out of control and dominates all aspects of human behaviour."[170] Daniel Dinello further adds to this by arguing that sci-fi cinematography is obsessed with "mad scientists, rampaging robots, killer clones, cutthroat cyborgs, human-hating androids, satanic supercomputers, flesh-eating viruses, and genetically mutated monsters."[171] Finally, he connects this obsession to the conclusion that it is sci-fi's basis for expressing fear of losing what is supposed to make us human: identity, values, and emotions.

Indeed, this notion of losing what is human emerges quite frequently in writings on a sci-fi film, reminding us of Fukuyama's thinking. Klohs believes that films which engage with representing scientific and technological developments can be characterised as primarily asking the following question: "what is human nature?"[172] Alexander Darius Ornella also adds to this by concluding, after Paul Ricoeur, that sci-fi film provides "an important ethical laboratory to (re)imagine and play with […] understandings of human nature," whatever the notion of being human might signify.[173] It feels that this predominantly anthropocentric understanding turns out to interest those authors, and it is still the idea of a stable

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[167] Deleuze, *The Logic of Sense,* 149.
[168] Karwande, "Projecting Technophobia," 33.
[169] Ibid.
[170] Ibid., 36.
[171] Daniel Dinello, *Technophobia! Science Fiction Visions of Posthuman Technology* (Austin: University of Texas Press, 2005), 2.
[172] Klohs "More Human than Human!" 184.
[173] Alexander Darius Ornella, "Uncanny Intimacies: Humans and Machines in Film," in Hauskeller et al., eds, *The Palgrave Handbook of Posthumanism in Film and Television*, 337-338.

human identity that persists as a unit of reference. The idea of a world as it has never been, linked to the idea that it is "human nature" that these films explore – and only explore as the notion of human nature presupposes that it has already stabilised and awaits the discovery as Barad would say – is what, I argue, turns to result in grudgeful approaches. That is why authors like Klohs see sci-fi films as essentially offering their audiences a chance to come closer to the understanding of what is human nature by thinking with "a creative and omnipotent inventor; with an enhanced being that is able to transgress the borders of the possible […]; or with a totally powerless victim […] who is subject to painful [medical] procedures."[174] The unknown creature is utilised to support the already solid notion of anthropocentrism. We can now be reminded of the notion that allows for going beyond such anthropocentric outlooks. Let us focus on how the notion of posthuman has been emerging in discussions then, keeping in mind its understanding as introduced before with the help of Braidotti and Barad.

When looking into sci-fi tropes considered by him as adding to the notion of posthumanism, Carbonell argues the following: "screened posthumans, more often than not, pose problems for the stable self."[175] The notion of the posthuman turns into one primarily interpreted as one that allows for pointing to how newly developing technologies – like genetic engineering – are threatening to extinguish the human world as it is known. What is posthuman brings so much novelty that it becomes impossible to be embraced. Anneke Smelik further clarifies this line of reasoning by pointing out the following:

> […] as a cinematic figure, the posthuman is typically represented as a hybrid between a human being and something nonhuman, the latter ranging from machines or digital technologies to plants, animals, monsters, and aliens. […] [The figure] projects a fantasy of a human who fuses with technology to become a *superior*, *enhanced*, and hence *threatening* being.[176]

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[174] Klohs, "More Human than Human!" 186.
[175] Carbonell, "A Contest of Tropes," 159.
[176] Anneke Smelik, "Film," in *The Cambridge Companion to Literature and the Posthuman,* eds. Bruce Clarke and Manuela Rossini (Cambridge: Cambridge University Press, 2017), 109-110. Emphasis added.

Most importantly, she concludes that in film studies, "the notion of the posthuman is primarily a speculative image rather than a philosophical concept."[177] This speculative image brings nothing but a being that causes havoc and should only be understood through the prism of being human. I find such interpretations troublesome, damaging even. Based on the discussion I engaged in before, I infer that the decision to connect the posthuman to the notion of being superior and therefore threatening is adding to the wounded literacies that we have already embodied: both of genetic engineering and one of sci-fi cinema. Understanding of this film genre as bringing science and technology whose predominant purpose and momentum is to frighten the human feels to be wounded.

Approaching this notion as wounded can allow us to think about it with compassion rather than animosity. All the wounds embodied by approaches to genetic engineering and sci-fi cinema were already there when those "posthuman interpretations" emerged. Now is the right time to think with what Bousquet asserted: "Become the man of your misfortunes; learn to embody their perfection and brilliance."[178] By coming in contact with sci-fi cinema, we are already living its wound in many different ways. Some live it by arguing that the genre is about the evil that lurks and all it wants to do is provide us with visualisations of everything that we hold dear being annihilated. Some live it by arguing that the posthuman in sci-fi cinema will destabilise our contemporary to such an extent that it would be impossible to embrace this destabilisation. The only way to live with such a destabilisation would be to fix it, make sure it does not emerge or make it look like it has never emerged by looking at it through the prism of what it means to be human.[179] Having the wound on one side and a posthuman performative subjectivity on the other, I trust that we can lead our ways of thinking in a much more affirmative direction.

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[177] Smelik, "Film," 110.
[178] Deleuze, *The Logic of Sense,* 149.
[179] Dolphijn, "The Cracks of the Contemporary," 19.

Towards living the wound

Katherine Hayles once wrote: "Only if one thinks of the subject as an autonomous self independent of the environment is one likely to experience the panic."[180] Suppose we think about all the sci-fi tropes and the already present "posthuman" interpretations of these tropes. In that case, we can argue that fear is predominantly based on this lack of connectedness performed by the highly damaging interpretations of sci-fi films. That is why I find it extremely relevant to bring the posthuman approach inspired by the wound, one that forms upon the wound. That is why I believe it is relevant to think about sci-fi film as wounded: to be able to connect to it thanks to all other wounds that we carry and that we encounter, to embrace it and love it in different ways; not just in one resulting in panic. What I want to offer is a new future for us as an audience of sci-fi films, as well as for the practice of genetic engineering – for us whose life might get increasingly entangled with it, those who work with it, as well those who think and write about it. I contend that the notion of human identity as stable and untouchable is hampering the development of a different kind of sci-fi literacy. It becomes a form of a wounding implicit bias making the interpretations of films like *Blade Runner* and *Gattaca* veer towards paranoia rather than relief.

The next chapter will provide a more detailed analysis of *Blade Runner* to show that what I see as the "wounded posthuman" is unfortunately embodied by many interpretations of the film. To go beyond this predicament, I will prove that the film allows us to move beyond seeing the notion of a stable human identity as a preferred unit of reference. The following chapter will provide us with an outlook on what is already there – the tropes, interpretations, dichotomies – as wounded and, therefore, will offer us the first instance of how we might start thinking otherwise. My main aim, from now on, is to look for a mode of unbiased alertness: towards the film, sci-fi genre, and genetic engineering. From now on, we will try to invent a posthuman performative subjectivity that is intrinsically unbiased as it forms upon the wound as its new unit of reference.

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[180] N. Katherine Hayles, *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics* (Chicago: University of Chicago Press, 1999), 290.

After all, we should not despair as we are already embodying wounded literacies; we can already start redefining our "sense of attachment" to what we encounter.[181] I stand here with Steven Shaviro's response to the sci-fi genre. As he writes, sci-fi, "despite what is sometimes said about it, does not really claim to predict the future. It is neither prophetic nor probabilistic;" rather, it is about extrapolation from trends of thought that are already there, about imagining what might happen, as well as about speculating upon outcomes of processes that are purely contingent and uncontrolled.[182] Shaviro stresses that sci-fi, above all, is about fabulation. Futures that the genre thinks about are "unavoidably vague and multifarious;" they resist our aims at comprehending and controlling them in advance.[183] What renders sci-fi irresistible is its boldness to embrace this vagueness and to gift us with characters with whom we can experience the indeterminacies that the genre invents. As I see it, sci-fi carries an incredible potential to let us reinvent our subjectivity towards a posthuman performative one. After all, sci-fi wants us to remain curious, constantly change our interpretations, and remember that there is no definitive answer to questions that it poses. David Seed once argued that "exploration lies at the heart of SF:" I believe now is a perfect moment to continue our exploration.[184]

[181] Braidotti, *The Posthuman*, 193.
[182] Steven Shaviro, *Extreme Fabulations: Science Fictions of Life* (London: Goldsmiths Press, 2021), 2.
[183] Shaviro, *Extreme Fabulations*, 2.
[184] Seed, ed., *A Companion to Science Fiction*, 4.

Chapter 3

Two different cuts, two different wounds: on *Blade Runner*

Why do the cuts count

Replicants are like any other machine.
They're either a benefit or a hazard.
If they're a benefit, it's not my problem.[185]

I find that the incredible potential and the beauty of *Blade Runner* emerge as a result of the fact that the film comes not only in one version. The cut made available in 1982 and another released in 1992 present us with varying content and entirely different interpretations.[186] I see both versions of the film as allowing for thinking with the notion of posthuman performative subjectivity that I develop here. To remind ourselves: subjectivity as a concept brings the way how one experiences themselves in the environment and understands this very environment;[187] it is defined based on encounters and events that one becomes part of and embraces;[188] as well as concerns ways how one thinks about oneself.[189] Keeping this line of interpreting in mind, I approach the two cuts of *Blade Runner* as primarily concerning the character of Rick Deckard and the question of how we can see his subjectivity reinvent itself. For now, we should delve into what precisely is meant by the notion of *Blade Runner* being characterised by two different cuts.

The version of the film shared with test audiences for the first time in early 1982, known as the Workprint Version, was not greeted with a well-affected response from spectators. The audience members, including critics, had identified the story as "slow and confusing," lacking the fast-paced character of sci-fi action films that were released at that time.[190] Faced with unfavourable responses to his ideas, the director Ridley Scott was forced to subject his material to significant changes before the

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[185] *Blade Runner*, 0:17:26-0:17:32. In this chapter, all film quotations come from the 1992 version of the film.
[186] In fact, *Blade Runner* comes in 7 cuts, each characterized by different edits. For the purpose of keeping my analysis as specific as possible, as well as to support my claim for a posthuman performative subjectivity, I focus on only two cuts in this thesis.
[187] Florence, "Foucault," 461.
[188] Deleuze, *Empiricism and Subjectivity*, 85.
[189] Braidotti, *The Posthuman*, 12.
[190] Matthew Flisfeder, *Postmodern Theory and Blade Runner* (New York: Bloomsbury Publishing, 2017), 95.

world could see the US Theatrical Cut from the end of June 1982 onwards. As the Workprint Version had been recognised as unpleasant and arduous to follow, the material was edited and adjusted into a more accessible one. First of all, Scott decided to include a voice-over narrative, following persisting calls of the producers. This measure was supposed to clarify the plot and let the voice of Deckard guide the audience. To render the film even clearer from its very beginning, the US Theatrical Cut welcomed its audiences with a couple of opening sentences bringing the background information about blade runners and Replicants and the supposed relationship between those figures; sentences that this essay started with. Furthermore, and which also was not the case for the Workprint Version, the Theatrical Cut included an adjusted ending scene, offering the audience a "happy end" to further minimise a feeling of confusion and disconcertment. With this ending, Deckard was supposed to leave the decayed city of Los Angeles with Rachael, once deemed human, although discovered to be a new Replicant model; a figure that he has entered a romantic relationship with.

Main reasons behind adjusting the Theatrical Cut have been established based on the audience's expectations and producers' on the one hand and the unsuccessful box office performance on the other.[191] The Theatrical Cut tried to compensate for what the Workprint Version had not pleased the audiences. Scott's changes to the material earned *Blade Runner* a "cult status" over the 1980s, leaving the film's underground position and rendering it a widely acclaimed material.[192] As the audiences gradually developed a taste for the film coming with Deckard's musings about the story, Warner Bros. Pictures decided to produce another version. Precisely a decade after the release of the US Theatrical Cut, spectators were gifted with the Director's Cut version. The label given to this version should not go unnoticed – the label alludes to the 1982 version of the film as being highly "manipulated by the producers."[193] The voice-over narrative led by Deckard and the happy ending enforced by the producers, seen by the director as "absurdly cheery," turned into those aspects that Scott decided to remove from

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[191] Cooper Hood, "*Blade Runner*'s Multiple Cuts (& Differences) Explained," *Screenrant*, June 8, 2020, https://screenrant.com/blade-runner-movie-multiple-versions-cuts-differences-explained/ (accessed March 14, 2022).
[192] Flisfeder, *Postmodern Theory and Blade Runner*, 96.
[193] Alejandro Rivero-Vadillo, "Dissident Cyber-Galateas on Screen: A Posthumanist Analysis of *Blade Runner* and *Per Aspera Ad Astra*," *Mundo Eslavo* No. 19 (2020), 196.

the version that would, at long last, allow him to share the film filled with his unhampered ideas.[194] The Director's Cut, therefore, introduced the storyline with the same background information provided by a couple of sentences as the US Theatrical Cut had done. However, this informational aspect turned out to be the only guiding help. Harrison Ford's voice, previously performing an additional role of a guiding narrator, was cut out. The happy ending, considered by Scott as adding an incongruous conclusion to the film, gave place to the scene that left Deckard and Rachael's future in an inconclusive state rather than letting them leave Los Angeles behind to fly into nature. The Director's Cut has turned out to oppose both the producers' musings and those of the first spectators. It let Scott gift new audiences with a material that would not only resist expectations dependent on marketing but, perhaps most importantly, would resist finite and unambiguous interpretations.

Let me pay more attention to what the two different cuts of the film do when it comes to the notion of subjectivity. As far as the US Theatrical Cut is concerned, the voice-over narrative led by Deckard feels to simplify the process of following and comprehending his thoughts that emerge throughout the storyline. The blade runner's reflections that he engages in while performing his duties – their ultimate result being shooting "to kill, upon detection, any trespassing Replicant" – allow the spectator to confirm their belief in Deckard's identity as a human, reinforcing the distinction between him and Replicants.[195] Furthermore, the ending scene of the 1982 cut, by sharing the conclusion of the relationship between Deckard and Rachael in the form of them leaving Los Angeles, also provided a further emphasis on the human versus Replicant division present in their relationship. The character of blade runner, falling in love with the Replicant while being human, has remained one of the most celebrated and often discussed aspects of the US Theatrical Cut of the film.[196] Keeping the identity of Deckard as persistently human – meaning, identifying himself as human, relating to the environment

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[194] Ted Greenwald, "Q&A: Ridley Scott Has Finally Created the *Blade Runner* He Always Imagined," *Wired*, September 26, 2007, https://www.wired.com/2007/09/ff-bladerunner/ (accessed March 21, 2022).
[195] *Blade Runner*, 0:02:48-0:02:57.
[196] See for example: Matthew Causey, "The Object of Desire of the Machine and the Biopolitics of the Posthuman," in *Resisting Biopolitics: Philosophical, Political, and Performative Strategies*, eds. S.E. Wilmer and Audronė Žukauskaitė, (New York: Routledge, 2016), 202-215.

around as human, as well as keeping the spectator assured that he is human without providing any hints to think otherwise – turns out to, nevertheless, fall into the patterns characteristic for commercial narrative. I also see it further adding to the wound of supporting the stability of the notion of human nature as a unit of reference.

As Varun Begley stresses when looking into the relationship between the 1982 and 1992 cuts of the film, the dramatisation present in the former version lets Deckard overcome obstacles and move "toward a happy though potentially uncertain future," therefore perfectly adding to the narration typical of Hollywood.[197] This narration, somehow necessarily gifting the spectator with a happy ending due to commercial reasons, is what Begley further argues the Director's Cut is full of distrust of. The conventional rendering of the story's conclusion as gleeful is what the 1992 cut is sceptical about. This scepticism turns out to be a crucial momentum giving a beginning to a tension that, ultimately, lets *Blade Runner* evolve into a film full of "resistance to the interpretive impulse."[198] While the US Theatrical Cut lets the spectator leave the experience of watching *Blade Runner* with confidence in Deckard's identity as a human, the Director's Cut does something completely different. The 1992 cut confirms Scott's belief in seeing the figure of Deckard as supposed to provide human identity for the spectator to more easily connect with as being not at all significant.[199] The Director's Cut is phenomenal in what it has accomplished: it did not merely omit the happy ending that had been enforced in the case of the earlier version. It truly destabilised the message of that earlier version. Letting the film end with the scene showing Deckard and Rachael entering an elevator to leave his apartment, the closing credits starting the very moment the elevator door closes, lends the blade runner's identity a remarkably different meaning. What is especially relevant and asks for greater attention is the moment when Deckard picks a unicorn origami that has been left by Gaff (a police officer), raises it to eye level, looks at it attentively, and nods with a slight smile on his face (fig.1).

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[197] Varun Begley, "*Blade Runner* and the Postmodern: A Reconsideration," *Literature/Film Quarterly* Vol 32, No. 3 (2004), 187.
[198] Begley, "*Blade Runner* and the Postmodern," 186.
[199] Emma Dibdin, "Is *Blade Runner*'s Deckard a replicant? Ridley Scott's definitive answer," *Digital Spy*, December 15, 2014, https://www.digitalspy.com/movies/a616639/is-blade-runners-deckard-a-replicant-ridley-scotts-definitive-answer/ (accessed March 22, 2022).

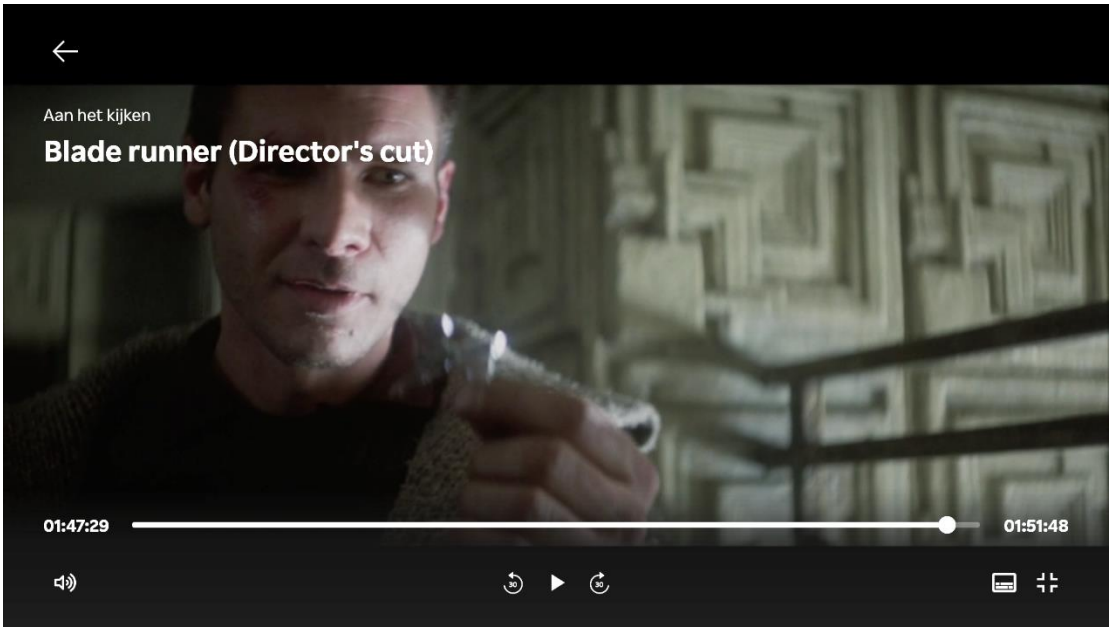

Figure 1. Deckard finds the unicorn origami to learn that he is in fact a Replicant. Still from *Blade Runner* (Director's Cut), directed by Ridley Scott (Warner Bros. Pictures, 1992). Access provided by Rakuten TV. Screenshot by the author.

This scene can also be seen in the US Theatrical Cut. Nevertheless, it cannot be argued as bringing anything significant to the idea one might develop concerning Deckard's identity. In the case of the Director's Cut, it is precisely this scene that proves to be crucial in this regard.

The centrality of this moment comes to matter thanks to an added scene in Deckard's apartment, when he sits baffled and drowsy at his piano, dreaming or daydreaming. The image that the spectator sees as emerging in Deckard's mind is one of a forest through which a unicorn runs (fig. 2). The significance of this dream becomes apparent when the protagonist finds the already mentioned unicorn origami when entering the elevator. His nodding reaction starts to make sense: the film both successfully and quite ingeniously implies that "Deckard is not human, after all" and that his human identity is no longer as stable as the US Theatrical Cut wanted it to be.[200] The reason behind this lies in the simple fact that Deckard's unicorn dream should belong to the private aspects of his life, known by him only. This nevertheless turns out not to be the case when we witness Gaff's origami directly hinting

[200] Flisfeder, *Postmodern Theory and Blade Runner*, 97.

that he knows the content of Deckard's dreams. The explanation that emerges based on this turn of events brings the following: the blade runner, throughout the film identifying himself as human, finds out that his dreams, memories and thoughts are not known by him only. He has been "gifted" with them, using Eldon Tyrell's wording, so that he would become a body that is easier to control. Its designers would already know what he thinks about, dreams about, and how he relates to the environment.[201] Deckard turns out to be a Replicant – a new, experimental model, just like Rachael – and his identity loses its stability. This destabilisation, however, does not come in the blink of an eye.

Figure 2. Deckard dreams his unicorn dream. Still from *Blade Runner* (Director's Cut), directed by Ridley Scott (Warner Bros. Pictures, 1992). Access provided by Rakuten TV. Screenshot by the author.

I argue that the Director's Cut beautifully manages to render this formation of subjectivity into a process that sometimes unfolds slowly and promptly, a process that we as spectators can witness if we are willing to. Scott's preferred version of *Blade Runner* becomes one that allows for asking questions, thinking, wondering, and not finding answers easily – or not at all. The Director's Cut can be approached not merely through the prism of the notion of human identity as bounded but should be

[201] *Blade Runner*, 0:22:02-0:22:06.

seen as allowing for noticing a process of forming a new subjectivity as a result of becoming otherwise.[202] While the Theatrical Cut was meant to be seen through the prism of the notion of identity, the Director's Cut elegantly allows us to think otherwise with a posthuman performative subjectivity.

Seeing the posthuman that is already there

Before we engage in a more in-depth discussion on how a posthuman performative subjectivity can be seen as emerging in *Blade Runner*, I find it important to ponder how the notion of the posthuman itself has already been emerging in thoughts on the film. The posthuman, in this case, turns out to be what I see as a wounded posthuman. As all the wounded tropes and wounded literacies are already there, interpretations of the question of how Deckard becomes otherwise feel to approach those wounds as unjust and with a certain grudge-bearing. I argue that interpretations that are already there are not doing justice to both perplexing and beautiful material of *Blade Runner*. Nevertheless, I argue that we should not see those wounded interpretations as abominable.

To start the discussion, I find it helpful to bring one of the least ambiguous interpretations that can be found. In David Reynolds' words, posthumans in the context of *Blade Runner* "are those who have somehow gone beyond being human, whether that is through evolution or augmentation."[203] Reynolds approaches the notion, first and foremost, through the prism of stable human identity. Within the discourse of such an interpretation, the film appears to be almost impossible to be wondered about without being firstly closely connected to the notion of the human. By seeing the posthuman through the prism of augmentation, the notion comes closer to Bostrom's understanding rather than the one offered by Braidotti and Barad. Interpretation of a physically stronger, more intelligent and acute body proves to suffice for Reynolds to argue that Replicants are "effectively post-human."[204] As they are

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[202] Braidotti, *Nomadic Theory*, 4.
[203] David Reynolds, "Being Post-Human in Ridley Scott's *Blade Runner*," *Reynolds' Thoughts and Fictions* (blog), October 13, 2014, https://davaflava.wordpress.com/2014/10/13/being-post-human-in-ridley-scotts-blade-runner/ (accessed March 21, 2022).
[204] Reynolds, "Being Post-Human," 2014.

"virtually identical to a human […] superior in strength and agility, and at least equal in intelligence, to the genetic engineers who created them," Reynolds sees them as perfect examples of posthuman bodies.[205] O'Mathúna's writing further adds to Reynolds' idea as the author develops an interpretation of the posthuman as characterised by "superhuman strength and endurance, and superintelligence."[206] After connecting the introductory description of Replicants with such a definition, there is nothing left to argue but to admit that they are indeed posthuman.

Alongside interpretations of Replicants as posthuman just because their bodies have been enhanced, another approach emerges, one very much adding to the notion of wounded literacies as I introduced before. According to those, the Replicant can be argued as adhering to and strengthening the understanding of the notion of posthuman as applicable to a technology that threatens "to reengineer humanity into a new mechanic species and extinguish the old one."[207] The body of a Replicant, being a result of advancements allowed by technology and a body that has been technologically enhanced, is seen from such a perspective as threatening. The sense of threat, in this case, results from the Replicant being nothing but an example of a posthuman technology – technology seen as malevolent because it is the basis for creating a superhuman body. This approach toward the posthuman brings different considerations compared to the one that the previous paragraph focused on. For O'Mathúna and Karwande, *Blade Runner* is a film that is predominantly focused on dramatising and communicating the realm of a posthuman technology that, once entered, causes humans to "suffer the consequences."[208] The consequences might include fear of human life and the human-led world being taken control of by the posthuman figure, which might result in supposedly only human notions like empathy and love, emotions, and human identity being lost, obliterated by the threatening posthuman. The posthuman technology, the figure created as its result, and the notion of the posthuman itself turn into forces that

[205] *Blade Runner,* 0:02:24-0:02:30.
[206] O'Mathúna, "Autonomous Fighting Machines," 147.
[207] Karwande, "Projecting Technophobia," 37.
[208] O'Mathúna, "Autonomous Fighting Machines," 148.

the introduced discussions closely connect with distress originating from the idea of human identity being put in question.

In the face of our present, bringing the tool of CRISPR on the one hand and filled with wounded interpretations of sci-fi cinema on the other, such approaches to the notion of posthuman in *Blade Runner* do not feel generous. Above all, authors writing on the film see it as predominantly tackling the notion of "humanness" and the question of "what is it that makes us 'human'."[209] The posthuman, the figure that *Blade Runner* brings in the form of a Replicant, becomes one whose primary purpose is to let us develop a distinction between what is human and what is not. The Replicant, following such interpretations, becomes worthy of attention as one allowing for coming closer to understanding – and sheltering the importance of – the notion of being human.[210] Such simplifying approaches presuppose that the prime notion that the Replicant introduces is that posthumans are figures posing "problems for the stable self," the self that wants to remain stable and understandable, above all.[211] The new dichotomy that emerges in discussions, placing the human on the one side and the posthuman on the other, feels to occupy a significant and robust position when considering what films like *Blade Runner* allow their spectators to ponder. To approach the notion of the posthuman alongside engaging with such film-inspired reflections is not necessarily encouraging. As Carbonell argues in his discussion on the question of how the posthuman emerges in film, finding "examples of positive […] screened posthumanism is difficult."[212] One might wonder whether thinking the emergence of the posthuman in cinema as otherwise, as not predominantly provoking fear and distress, was possible. It indeed is, as long as we keep the wound in mind.

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[209] Tihana Bertek, "The Authenticity of the Replica: A Post-Human Reading of Blade Runner," *[Sic] - a Journal of Literature, Culture and Literary Translation* No. 1 (2014), 1.
[210] Christine Cornea, "Figurations of the Cyborg in Contemporary Science Fiction Novels and Film," in Seed, ed., *A Companion to Science Fiction*, 275.
[211] Carbonell, "A Contest of Tropes," 159.
[212] Ibid., 157.

Losing stability, allowing the wound to surface

DECKARD. She's a Replicant, isn't she?
TYRELL. I'm impressed. […]
DECKARD. I don't get it, Tyrell. […]
She doesn't know?
TYRELL. She's beginning to suspect, I think.
DECKARD. Suspect? How can it not know what it is?[213]

Every material can earn a new life when being engaged with. Smelik argues that discussions in cinema studies, touching upon films like *Blade Runner* as the previous section outlined, bring the "notion of the posthuman [as] primarily a speculative image rather than a philosophical concept."[214] Throughout this section, I will explore the possibility of thinking and becoming otherwise based on the wounds that are already there. The figure of the posthuman, seen as present in *Blade Runner* as some authors argue, is comprehended as one causing havoc to the (supposed) stability and transparency of the idea of what it means to be human. It is the human identity that the posthuman causes unsettlement to. The feeling of the self is considered as – and required to be – finite, stable, and circumscribed. Even though authors who bring the notion of the human identity to their discussions do not clarify what they mean with it – apart from stressing that the posthuman is the other carrying the power to destabilise it – they recognise this notion as crucial when developing the connection between the posthuman and *Blade Runner*. We can argue that, despite the supposed stability that the notion of human identity delivers, such a perspective certainly does not result in equally secure interpretations. These interpretations make those coming in contact with films bringing the posthuman feel miserable, disquieted, and fearful due to such cinematic pieces being seen as predominantly bringing a "repulsive picture" of what might happen.[215] Thankfully, the thinking that Braidotti and Barad bring can help us move beyond this predicament.

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[213] *Blade Runner*, 0:21:21-0:21:41.
[214] Smelik, "Film," 109-110.
[215] Karwande, "Projecting Technophobia," 37.

I find the notion of posthuman performative subjectivity particularly compelling to apply to *Blade Runner*. As this chapter already outlined, the Director's Cut allows for significantly different interpretations regarding the question of who Rick Deckard is and how he becomes otherwise. The lack of the voice-over narrative and the addition of the unicorn dream scene gift the film with "resistance to the interpretive impulse," as Begley puts it.[216] The Director's Cut does not force any straightforward interpretations upon spectators. It lets them follow the blade runner's actions without hearing him share his musings, which could, after all, make them feel obliged to interpret the story's unfolding in a certain way and not another. I argue that offering an approach that embodies a posthuman performative subjectivity is relevant. The exploration of the character of blade runner from such a perspective will allow for further development of the discussion. From now on, I will focus on how other characters we encounter in Blade Runner can also be looked at with the help of posthuman performative subjectivity. I will do so to start thinking about how we can reinvent the subjectivity that the wounded interpretations of the film have provided us with.

We will start the exploration of the posthuman performative subject in *Blade Runner* with the scene when the spectator encounters Deckard for the first time. We witness the blade runner sitting under a roof in a city of an endless downpour, reading a newspaper in a somewhat disinterested way. Thanks to the lack of a voice-over narrative, we get to hear clearly the first thing that Deckard pays attention to. Raising his head, he hears the announcement blaring from a hovercraft:

> Use your new friend as a personal body servant or a tireless field hand.
> The custom-tailored, genetically engineered humanoid Replicant, designed especially for your needs.[217]

Hearing this announcement becomes the very first moment upon which we can see the relationship between Deckard and the Replicant starting to unfold. Deckard, at this moment, is a figure approaching

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[216] Begley, "*Blade Runner* and the Postmodern," 186.
[217] *Blade Runner*, 0:08:36-0:08:47

and identifying Replicants based on their outlined functions. As a blade runner, he sees those figures as possible targets that should be eliminated when they trespass objectives they have been designed for. For Deckard, Replicants are "like any other machine. They're either a benefit or a hazard," and if they bring benefits, he does not perceive them as troubling or worthy of his attention.[218] His profession allows him to, or rather forces him to, recognise Replicants as figures that can be discovered as nonhuman with the help of the technologically ensured "Voight-Kampff" test.[219] The moment Deckard enters Eldon Tyrell's mansion to use his expertise in the centre of the Tyrell Corporation's ingenuity that has brought the body of a Replicant to the early twenty-first-century world, his approach towards the Replicant seems to start to waver. Upon finding out that Rachael is in fact not human, just an experiment for Tyrell, Deckard acknowledges it as unsettling that one might be so oblivious to their identity as we have found out from the quote which this section started with. While for Tyrell, Rachael allows him to indulge himself – perhaps in his human ingenuity that has "given birth" to her figure, therefore adding to the wounded trope of a scientist as revelling in his brilliance, predominantly – for Deckard, her figure turns out to frustrate his "attempts to formulate correspondences or construct interpretations."[220] Rachael's visit to his apartment, mainly attributable to her being shaken by both finding out that she cannot identify herself as human anymore and by her unsuccessful attempts at addressing this issue with Tyrell, seem to further cause havoc to Deckard's touch for Replicants. His at first dispassionate and mocking comments about Rachael's memories that she holds so dear – memories that he sees as being only implants belonging to Tyrell's niece, nothing to feel connected to from his perspective – transform into disorientation and bafflement. These are not reactions he has been used to when working with Replicants.

The notion of posthumanism carries a disruptive force, as Joanna Pascoe argues, following Braidotti's thinking.[221] The disruption comes from the posthuman agency challenging the notion of

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[218] Ibid., 0:17:26-0:17:32.
[219] Ibid., 0:18:07-0:18:08.
[220] Begley, "*Blade Runner* and the Postmodern," 190.
[221] Joanna Pascoe, "Posthuman Heroes," *Heroism Science: An Interdisciplinary Journal* Vol. 4, No. 2 (2019), 4.

human identity. Here *Blade Runner* turns out to provide compelling thoughts. While some already mentioned writers see the body of a Replicant as posthuman and, as a result, sinister, I believe that the unfolding relationship between Deckard and Rachael feels to question such an assumption. Deckard, still relating to those around him as a human at this point, does not recognise the danger in the figure of Rachael. Instead, he starts to develop a form of alliance with her. Despite his previously cold-hearted approach to Replicants, the relationship with Rachael destabilises it. It seems that he ceases to relate to her based on the human versus nonhuman distinction that builds on identity. It seems that his unit of reference, thanks to which he makes sense of the world, starts to transform. It is no longer the stable identity that counts.

After all, Rachael's character embodies the matter that there is nothing like a stable identity. What is already there, I argue, is a posthuman performative subjectivity: changing, transforming, letting one embrace what comes with relations that it encounters. In the case of such subjectivity, the notion of a unit of reference is offered a possibility to change. In the case of *Blade Runner*, I propose that it is based on the wound that characters are offered opportunities to relate to each other and to become more compassionate, unbiased. By opting for acceptance of what happens to them, they are not approaching the misfortunes – the wounds – that they happen to embody with bitterness or resentment. Not at all; they in fact manage to become "worthy of what happens" to them.[222] If we try, the same can happen to us, those embodying the wounded literacies of genetic engineering and sci-fi cinema. We can now see how the wound becomes a productive and liberating concept upon which new ways of relating and becoming otherwise can emerge.

[222] Deleuze, *The Logic of Sense,* 149.

Letting the wound surface, letting the posthuman in

I've seen things you people wouldn't believe…[223]

Let us come back to looking into the relationship between Deckard and Rachael. As we have seen, Tyrell's indifferent approach to keeping Rachael oblivious to who she is renders the blade runner distressed. For him, it feels unthinkable to keep an individual so "self-unaware."[224] His later conversation with Rachael feels to deepen his awareness of who she is. He notices that her memories, supposed to let her develop self-awareness despite not being hers, make her desire a stable human identity. Deckard notices Rachael as a figure who can no longer locate herself in the world, and starts to reconsider his approach to Replicants. No longer feeling sure about how he should relate to her figure, he can be seen as starting to get rid of his stable human identity and developing a posthuman performative subjectivity. With his unit of reference changing, he looks for a new one; one that would let him come closer to comprehending who he is when the Replicant is close. Rachael's uncertainty about who she is has always been there; she only discovered this when the specific moment came. This wound has always been there, secretly hiding, but always there. Upon learning about who she is, the only person she decides to reach out to is Deckard, the one responsible for letting her not human but Replicant self emerge. And Deckard, very much contrary to Tyrell, allows his subjectivity to become otherwise upon seeing how Rachael is wounded. If we remind ourselves what the Director's Cut brings regarding the question of who Deckard in fact is, our contemplation can go even deeper.

After all, Deckard turns out to be equally wounded as Rachael; it just takes longer for him to notice and embrace it. The mysterious unicorn dream and the final scene showing him picking up an

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[223] *Blade Runner*, 1:41:58-1:42:04.
[224] Bertek, "The Authenticity of the Replica," 5.

origami left by Gaff make it all clear. Deckard can be seen as wounded as he feels to be the only one oblivious to the fact that he is an individual whose relation with genetic engineering cannot be more intimate as he is its result. This wound is already there; after all, Tyrell and Gaff are those who know Deckard more than he does; it becomes visible when the right time comes. The blade runner reacts remarkably to the discovery. Picking up the unicorn origami from the floor, he raises it to his eye level to later give it a slight smile as a mark of his recognition and approval. We might wonder whether the information that he has been living his posthuman performative subjectivity ever since, letting it unfold and become performative through various experiences of relations with other figures, comes with a relief to him. Perhaps we can see him as a figure that has been gradually maturing to find something that has already been there and embrace it with no traces of bitterness. What has allowed him to mature to this state were the wounds that have always been there, making themselves visible to let life unfold.

The relation between Deckard, Rachael, and the notion of how they live their posthuman performative subjectivities is not the only one we witness in *Blade Runner*. In fact, I see the film as allowing us to continue developing alertness to and acceptance of other characters' wounds, as well as our own. The film makes us aware that the Replicant is always created with a particular purpose. Some can be the so-called combat models (Roy Batty) or pleasure models (Pris), while others can lead their life as loaders (Leon Kowalski). The Replicant's significance is judged based on its functionality. To ensure Replicants remain invariably utile, they:

> were designed to copy human beings in every way except their emotions. The designer's reckoned that after a few years they might develop their own emotional responses. You know, hate, love, fear, anger, envy… So they built in a fail-safe device […] Four-year life span.[225]

[225] *Blade Runner*, 0:15:02-0:15:19.

The Replicant becomes one that is "emotionally inexperienced," following Eldon Tyrell's words.[226] Emotions, reactions, and experiences, which by a non-Replicant self are rather taken for granted, Replicants encounter as well but while lacking any preparation to do so, and only for four years. The figure of a Replicant embodies what is most desired from the perspective of functionality: intelligence, agility, and strength. Such a design decision allegedly ensures that a Replicant remains what it is presupposed to remain: a tireless servant, unable to comprehend the reasoning behind its slavery because it is devoid of emotional responses that would have enabled it to develop self-awareness. A decision to introduce the Replicant as such, I believe, allows us to notice the wound that has already been there: one of seeing the world through the prism of what is human only and to be used to meet human expectations. And when it comes to emotions, *Blade Runner* excellently manages to develop an approach that can make us wonder how we can reconsider such a unit of reference.

Following the discussion led by Alain Morin, self-awareness can be understood as referring to the state in which one "actively identifies, processes, and stores information about the self."[227] Self-awareness includes reflecting on the external world, which might take the form of being aware of one's agency in a given situation.[228] Mindfulness about what the notion of self-awareness connotes can bring significant interpretations in connection to what I have pointed out concerning the figure of a Replicant. Self-awareness, in other words, can be understood as knowing what one is feeling and the reason behind that; it is the ability to comprehend one's emotions and how they influence one's performance; it is the ability to develop subjectivity.[229] Developing self-awareness greatly depends on emotionality; the relationship between those two notions is inextricable. While self-awareness permits to perceive

[226] Ibid., 0:21:55-0:21:58.
[227] Alain Morin, "Self-Awareness Part 1: Defintion, Measures, Effects, Functions, and Antecedents," *Social and Personality Psychology Compass* Vol. 5, No. 10 (2011), 808.
[228] Morin, "Self-Awareness Part 1," 808.
[229] Daniel Goleman, "What is Emotional Self-Awareness?" *Korn Ferry,* 2022, https://www.kornferry.com/insights/this-week-in-leadership/what-is-emotional-self-awareness (accessed April 7, 2022).

emotions, emotional responses give rise to and constitute the state of being self-aware.[230] One does not exist without the other, and both establish an unceasing endeavour of becoming otherwise.

The figure of a Replicant, deprived of the ability to feel emotions, becomes an ideal candidate for a slave. A self-unaware slave will not question the reasons behind its fate. It will not make connections between its draining duties and what those duties bring to its sense of self. The self-unaware Replicant is supposed to follow orders immaculately, thanks to its intelligence and stamina. It is not made to develop an emotional response to experiences that bring it an undoubtable exhaustion. If it were to develop those, it would probably no longer be willing to follow the orders. That is precisely what the Tyrell Corporation wants to avoid, hence the four-year life span of the Replicant body. The moment a figure previously lacking any emotional responses starts to develop them, it enters the process of necrosis.[231] The Replicant beautifully embodies the wound of seeing the world through the prism of what is human only and the wound of technology seen as a mere means to an end. It is not merely a threatening figure as some interpretations suggest: it is a wounded figure that we can think with rather than against. By turning what is supposed to be human only – emotions – into that which the Replicant is deprived of, the film simultaneously makes us notice that the notion of the only human can be weaponised to ensure its stable identity. The film embodies the wounded literacies that apply to genetic engineering, seen as carrying an agency to cause havoc to the known human world, as well as to those that concern the sci-fi genre interpreted as merely asking the question of what it means to be human.

I conclude my reading of *Blade Runner* by looking at one of the film's final scenes. The finale brings us scenes of vicious combat between one of the rebellious Replicants – Roy Batty – and Deckard. As we learn, the blade runner proves not to be able to win this fight: there comes a moment when we witness him dangle from a skyscraper, desperately trying not to fall. Batty, full of strength, observes his

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[230] Cristina Gonzalez, "The importance of self-awareness and emotional intelligence in young adults," *Marbella International University Centre,* March 24, 2020, https://miuc.org/self-awareness-and-emotional-intelligence-in-young-adults/ (accessed April 7, 2022).

[231] Necrosis is an "irreversible cell injury and eventual cell death due to pathological processes […] It is an uncontrolled cell death." Source: Nabeeha Khalid and Mahzad Azimpouran, "Necrosis," *The National Center for Biotechnology Information*, last updated on March 9, 2022, https://www.ncbi.nlm.nih.gov/books/NBK557627/ (accessed July 8, 2022).

struggles. Curiously enough, he decides to grab Deckard's hand the moment he starts falling. Holding the blade runner with one hand, Batty lifts him to lay him down on the skyscraper's roof. Naturally, Deckard is full of bafflement (fig. 3). Batty decides to sit next to him to share his final musings before his life span comes to an end:

> I've seen things you people wouldn't believe. Attack ships on fire off the shoulder of Orion. I watched C-beams glitter in the dark near the Tannhäuser Gate. All those moments will be lost in time like tears in rain… Time to die.[232]

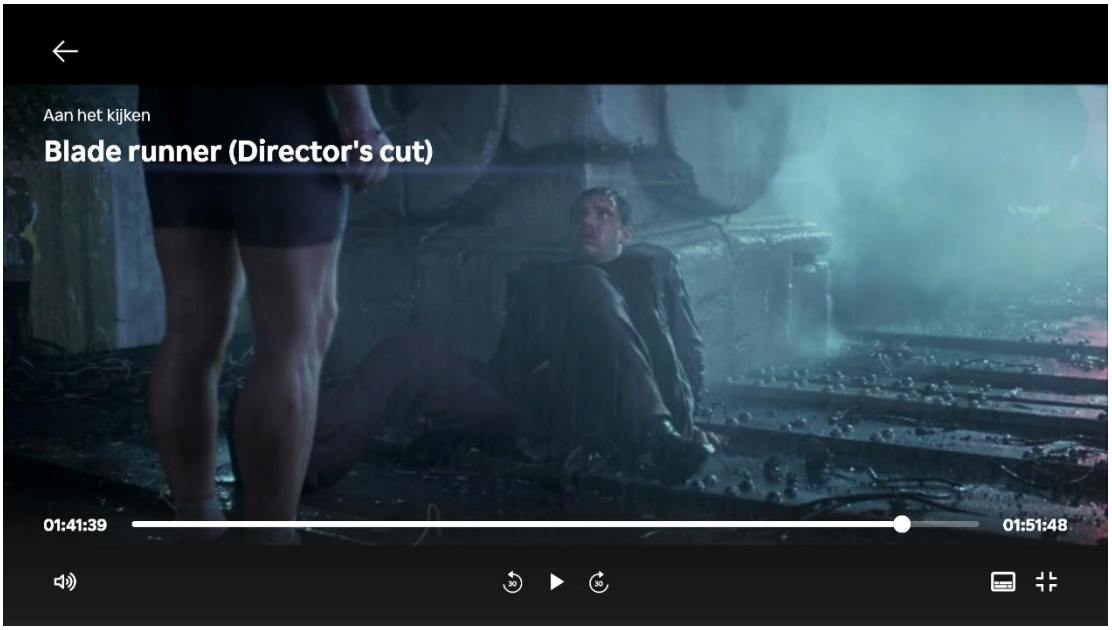

Figure 3. Roy Batty sits next to Deckard, the moment after saving the blade runner's life. Still from *Blade Runner* (Director's Cut), directed by Ridley Scott (Warner Bros. Pictures, 1992). Access provided by Rakuten TV. Screenshot by the author.

I argue that the moment he decides to save Deckard's life, Batty is neither coming closer to becoming human,[233] nor is he showing a desire to develop empathy with the humanness of Deckard (as he has no idea that the blade runner is in fact a Replicant). He is not developing a connection - as he shouts

[232] *Blade Runner*, 1:41:58-1:42:47.
[233] Nick Lacey, "Postmodern Romance: The Impossibility of (De)centring the Self," 190-199 in *The* Blade Runner *Experience: The Legacy of a Science Fiction Classic*, ed. Will Brooker (New York: Wallflower Press, 2005), 190.

"Kinship!" the moment he grabs Deckard's hand to save his life - to the blade runner by trying to become human.[234] I notice Roy Batty's monologue as "in its entirety a meditation on the wound," to return to Bousquet and Deleuze.[235] I argue that he is forming a connection thanks to the wound. Upon becoming self-aware as his four-year life span reaches its end, he recognises that he has always been embodying the wounds: of a figure created thanks to new technology and therefore seen as a mere experiment and an instrument; of a figure deemed inferior to humans as he cannot be seen as embodying a human identity; of a figure seen as dangerous and nothing more. I infer that Batty, rather, allies with Deckard because he recognises him as an equally wounded figure. By choosing not to let the blade runner die and to share his musings, he is deciding to approach their wounds not as unjust and abominable. Instead, he recognises and embraces them. He sees the wounds as his new unit of reference. Thanks to the figure of Roy Batty and the reading I have engaged in, I can argue that the Replicant is not about coming closer to knowing "what it means to be human." Instead, it is about becoming aware of the wounds that have always been there. Knowing that it is possible to discover a posthuman performative subjectivity from what is already there, I now want us to turn to my second case study. Throughout the next chapter on *Gattaca*, I will explore the question of what would it mean to invent a posthuman performative subjectivity.

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[234] *Blade Runner*, 1:41:12-1:41:31.
[235] Deleuze, *The Logic of Sense*, 348.

Chapter 4

It is the wounds that liberate: on *Gattaca*

Introducing the film by causing uproar

> They used to say that a child conceived in love has a greater chance of happiness. They don't say that anymore. […] Ten fingers, ten toes, that's all that used to matter. Not now. Now, only seconds old, the exact time and cause of my death was already known.[236]

Gattaca turns out to be a film that has allowed us to embrace the wounds as we know them already from the moment they emerged in the public discourse on genetic engineering. Following Katharina Fürholzer, the film shows, in the darkest way, that genetic enhancement shapes "our individual and collective understanding of identity."[237] Throughout the following section, I touch upon what turned the film into such a powerful work. Throughout the following sections, I trace how the world of *Gattaca* has been developing its woundedness and how it has been and is living its wound: of dichotomies, of body-mind distinction, of raising what is possible to be taken control of with the help of technology – genes – to the top. I do so to form a background for developing and exploring a posthuman approach to the film's characters – to discovering the posthuman in the film.

Doing so will add a fruitful bit to the already present discussions on the film, which, when the notion of the posthuman does emerge, link it with its transhuman interpretation, developing the notion of the valid body as a superhuman entity, supposedly unblemished, brought to the world with the help of technology. I will argue that, even though the film is rarely interpreted from the philosophical posthuman perspective, it is possible and crucial to see it as providing us with a remarkably noteworthy take on what it might mean to become otherwise upon the wound to invent a posthuman performative subjectivity. Thanks to this chapter, I will see *Gattaca* as an agent and companion in relations we can think of forming with genetic engineering. Here I will explore one of the undeniably infinite possibilities

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[236] *Gattaca*, 0:09:16-0:09:46.
[237] Katharina Fürholzer, "Artistic Enhancement. Literature and Film as Mirror and Means of Human Enhancement," *Acta Universitatis Lodziensis. Folia Philosophica. Ethica-Aesthetica-Practica*, No. 32 (2018), 75.

of approaching the question of how we can embrace the "perfection and brilliance" of the wounds that are already there.[238] Here I will show that the wound indeed carries a liberating agency.

The beginnings of the sci-fi film *Gattaca*, directed by Andrew Niccol, brought some curious and troubling cases. It all started a couple of months before the film's release in the United States. In June 1997, a test screening took place, addressed particularly to the Society of Mammalian Cell Biologists; a society also included many researchers dealing with human genetics. Among the audience members was William French Anderson, a pioneer of human gene therapy. He admitted that the film had "no major flaws," scientifically speaking.[239] Apart from that, Anderson – supported by other scientists at the screening – acknowledged that the then-present ending performed the most influential role in the film. As we can read in Andrew Niccol's screenplay, *Gattaca* originally ended with a series of portraits of renowned figures accompanied by titles listing "their affliction rather than their accomplishments."[240] Among the names emerging on the screen was Homer ("blind from birth"), Rita Hayworth ("Alzheimer's Disease"), and Charles Darwin ("chronic invalid").[241] Seeing the face of Darwin fading away, members of the first audience of *Gattaca* read:

> Of course, the other birth that would
> surely never have taken place is your own.[242]

Unquestionably powerful, captivating, and persuasive, the ending quote was nevertheless removed from the film. Keeping in mind audiences with no scientific background and expertise, the co-producer of the film, Gail Lyon, considered the original ending too heavy and carrying far too much potential to make the audiences feel as if they were experiencing a personal attack.[243] As a result, the film's conclusion was

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[238] Deleuze, *The Logic of Sense,* 149.
[239] David A. Kirby, "The New Eugenics in Cinema: Genetic Determinism and Gene Therapy in *GATTACA*," *Science Fiction Studies* Vol. 27, No. 2 (2000), 209.
[240] Andrew M. Niccol, *Untitled,* [*Gattaca* script], film script, 1997, https://thescriptsavant.com/pdf/Gattaca.pdf (accessed April 27, 2022), 114.
[241] Niccol, *Gattaca* script, 115.
[242] Ibid.
[243] Kirby, "The New Eugenics in Cinema," 209.

subjected to quite a significant change. Nevertheless, that did not end the uproar that the film inspired even before its release.

On September 12, 1997, readers of newspapers such as *The Washington Post, The New York Times, USA Today,* and *The Los Angeles Times* had their attention grasped by advertisements for *Gattaca*.[244] Going through their newspapers, they saw a full-page commercial divided in half, with one part showing a photograph of a baby and the other covered in writing. The text brought a breakdown of what the previously unknown company named "Gattaca" pitched for being specialised in: "children made to order."[245] Familiarising with the content, the readers discovered that "there has never been a better way to bring a child into the world," as at Gattaca, engineering one's offspring became an easily attainable possibility.[246] In addition, the advertisement listed different traits that would become a subject of discussion between future parents and the company representative. Therefore, notions such as inheritable diseases, skin pigmentation, mental and visual acuity, gender, or bodily stature were mentioned.

The reader's eyes could have been changing their focus back and forth, focusing on the elaborate writing on the one hand and the baby's photo on the other – a photo of a vulnerable and delicate creature placing all its trust in its parents. The advertisement did not explicitly reveal itself as a part of a marketing campaign for a film, which apparently worked in its favour. Finding the idea of having their future children genetically engineered encouraging and, perhaps most importantly, achievable, thousands of people dialled the phone number enclosed with the advertisement's content.[247] Similarly to the film's original ending, the campaign generated quite some complaints – this time on the part of human genetic researchers. Some argued that the advertisement was trivialising the practice of genetic research and demonising it. Some asked for subjecting its content to change to render it less actual than it appeared.[248]

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[244] Ibid., 210.
[245] Michael Moe et al., "Made to Order," *A2Apple,* December 17, 2017, https://www.a2apple.com/made-to-order/ (accessed April 27, 2022).
[246] Moe et al., "Made to Order."
[247] Ibid.
[248] Kirby, "The New Eugenics in Cinema," 211.

Despite all those controversies, however, the advertisement successfully realised its aim. The same applied to the original ending, which, although deleted, must have been somehow available as it featured in Philip Yam's review of the film published in the pages of *Scientific American* the same month the film was released.[249] Following David A. Kirby, the controversies actually emphasised the theme that the film decided to bring: "we are approaching a point when we will have the ability to radically alter our genetic makeup and we need to start thinking about the consequences."[250] Materials created alongside *Gattaca*'s release, as well as the film's original yet deleted ending, managed to allow the audiences to notice that there is something wounded about the film.

Seeing the wound as it surfaces

Let us come back to the film quote that this chapter started with. What we hear, in the form of a voice-over narrative in the beginning scenes of *Gattaca,* are musings of the protagonist: Vincent Freeman. The film introduces the character as a man in his thirties, engaging in a form of an elaborate analysis of the self; a reflection on who he is in the world of "the not-too-distant future."[251] As it turns out, the world that Vincent lives in is the one that has followed the promises of the advertisement that was part of *Gattaca*'s marketing campaign. His monologue starts by admitting that parents' love for their child proves insufficient to lead the newborn towards a happy life. Here we are reminded of what Coeckelbergh brings with his discussion on the wounded link between happiness and genetic engineering.[252] Vincent sees himself as a perfect example of that ascertainment – born out of love. However, he is bewildered that his mother decided not to turn to local geneticists but rather to "put her faith in God's hands."[253] The result of that decision is a birth that should not have taken place in a world specialising in genetic engineering and equating one's level of happiness with an engineered genetic profile.

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[249] Philip Yam, "Clean Genes," *Scientific American* Vol. 277, No. 4 (1997), 154.
[250] Kirby, "The New Eugenics in Cinema," 211.
[251] *Gattaca,* 0:04:24.
[252] Coeckelbergh, "Cyborg Humanity and the Technologies of Human Enhancement," 141.
[253] *Gattaca*, 0:09:28-0:09:30.

Vincent's mother cannot even hold her newborn son without first hearing about his time and cause of death. The first thing that happens in her child's life is not being held by its mother. It is taking of a blood sample, followed by a readout of a rapidly generated genetic profile. Marie Freeman, together with her husband Antonio, are full of dismay at hearing how their son is "greeted" into the world by a medic:

> Neurological condition: 60% probability. Manic depression: 42% probability. Attention deficit disorder: 89% probability. Heart disorder: 99% probability. Early fatal potential. Life expectancy: 30.2 years.[254]

All those incredibly pessimistic news about Vincent's future follow him and become a form of a wounding prophecy – always already there, marking a presence the protagonist experiences from the earliest age possible. As he admits when narrating a scene showing himself as a little boy of around two years old, running in a garden and clumsily falling, from "an early age I came to think of myself as others thought of me: chronically ill. Every skinned knee and runny nose was treated as if it were life-threatening."[255] Vincent's narration gradually entangles us in "the obsessive role assigned to genetic identity," as Pere Gallardo-Torrano calls it.[256] The individual's genetic profile becomes the only aspect that matters in forming a sense of self. Any individual is perceived through the prism of their genes – and nothing more. Hearing how Vincent performs the role of the narrator – keeping his tone of voice invariably calm and relatively slow – can lead us to conclude that genetic engineering has become a norm in the world he is part of. Genetic profiles are all that counts and all that matters when it comes to developing one's perception – both of oneself and of all others.

That is why we hear Vincent acknowledge that he turns out to belong to a new underclass, one that has been developed no longer based on one's social status or skin colour but formed based on

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[254] Ibid., 0:09:51-0:10:12.
[255] Ibid., 0:10:39-0:10:48.
[256] Pere Gallardo-Torrano, "The Body as Utopia: *Gattaca*, by Andrew Niccol (1997)," *Spaces of Utopia: An Electronic Journal*, No. 5 (2007), 46.

"discrimination down to a science."[257] In a world where genetic engineering of children has become a norm, Vincent's genetic identity as one born without the aid of technology turns into the reason that places him in this new underclass. His birth does not only gift him with life and the identity of Vincent Freeman, born out of his parents' love. Not at all; the world "welcomes" him with a series of labels: "utero," "faith birth," and "in-valid."[258] Those labels have been carefully thought through to further strengthen and support the notion of who belongs to the new underclass. As it turns out to be formed by those deemed in-valid based on their unenhanced genetic profile, a new upper class emerges as a matter of course. Those belonging to the new upper crust are worthy of being called "valid[s]," "vitro[s]," those who were made and not just born.[259] Naturally, those of the upper class do not only enjoy being called by better epithets – what they enjoy is virtually anything that those born with faith not put in genetics can only dream of. *Gattaca* becomes an epitome of the wounded literacy that makes us see genetic engineering as supposed to result in new dichotomies, above all.

The world that Vincent was born into is entirely dependent on the perception of one's genetic profile. Klohs argues that the "education and employment, insurance and income, social standing and marital status" of an individual depend solely on the kind of genes one comes to the world with – and nothing more.[260] This is why Vincent shares his bitterness towards how the society he is part of identifies him, as well as how it interprets the technology of genetic engineering. His bitterness does not merely come from being perceived as supposedly chronically ill. As we learn, the protagonist's dream has always been to become part of a journey into space. Indeed, we see Vincent at the age of two, running and tripping in a way ordinarily infant, to look up at the sound of what we might argue is a rocket beginning its journey.[261] The thunderous sound comes from a place that Vincent later learns would be his dream working site – The Gattaca Aerospace Corporation,[262] responsible for preparing manned space missions.

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[257] *Gattaca,* 0:19:11-0:19:15.
[258] Ibid., 0:33:15-0:33:19.
[259] Ibid., 0:33-19-0:33:21.
[260] Klohs, "More Human than Human!" 188.
[261] *Gattaca,* 0:10:39-0:10:48.
[262] To avoid confusion, I later address the company as "Gattaca," written in a non-italicised font.

The name of the corporation should not go unnoticed. Cleverly enough, it was named based on the initials of four chemical compounds (known as nucleotides) that function as constituents of DNA: guanine (G), adenine (A), thymine (T), and cytosine (C).[263] We discover that what Gattaca holds the dearest and what it cherishes the most is what one's DNA offers and brings as already predetermined. Parents, choosing to bring their child to the world in a way that has become natural, place their trust in technology that allows for "a careful selection of physical and intellectual features."[264] A child whose features have been designed even before conception has a genetic profile bearing no conditions that might be detrimental to its future life.

To let us have a more precise example: conditions that future children are carefully designed not to develop are those that Vincent was born with. Ailments such as a heart disorder have no right to occur in a life of a person who has been genetically engineered. As Gattaca's value system is built solely on accepting those with the right genetic profile, Vincent's genes naturally do not grant him access to the place he has always dreamt of. Values that exclude the protagonist from Gattaca and constitute its "recruitment philosophy," as we will find out in the following section, are not to be found in the corporation only.[265] I would instead argue that Gattaca, so much believing the valid genetic profile above anything, starts to function as a form of a quintessence of the future society that Vincent was born to. It is not only Gattaca that excludes the protagonist – it is the whole society represented by social relations that does so. Gattaca provides a form of a quintessence of wounds that Vincent lives with from the very moment of his birth. As we will see in the following section, those wounds are not necessarily inhibiting for Vincent.

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[263] *National Cancer Institute,* "Adenine,"https://www.cancer.gov/publications/dictionaries/cancer-terms/def/adenine (accessed April 28, 2022).
[264] Gallardo-Torrano, "The Body as Utopia," 46.
[265] *Gattaca,* 0:46:37-0:46:40.

When the in-valid becomes valid

So began the process of becoming Jerome.[266]

Call me Eugene. My middle name.
If you're gonna be Jerome,
you'd better start getting used to it.[267]

As we follow Vincent, we discover that his dream remains unchanged despite constant reminders regarding his genetic status. Such a persistent attitude is frowned upon even by his parents, whose outlook on their son changes from one based predominantly on concern when they welcome his brother Anton to their family. While Vincent was not considered worthy by his father to be named after him, the situation turns out to be otherwise with Anton. His brother, brought to the world in the way that has become natural, was chosen by his parents as "the most compatible candidate" out of four fertilized and carefully selected eggs.[268] Naturally, Anton is not burdened with any predispositions that would result in diseases, as is the case with Vincent. His parents are convinced by their geneticist to ensure that their second child will also not be burdened with any "potentially prejudicial conditions: premature baldness, myopia, alcoholism, an addictive susceptibility, propensity for violence, obesity."[269] Naturally, they agree upon hearing that this child will still be their child, it will still be them; only the best of them.

Seeing Anton grow together with Vincent, we can so well see a form of division being established. We witness Antonio register Anton's height at the age of eight, which, already towering above that of Vincent at the age of ten, evidently pleases both him and his wife. Vincent goes unnoticed, fiercely wiping his name off the pillar covered in brothers' names written down next to their age and corresponding height (fig. 4). Seeing the brothers play on the beach, we witness Vincent's offer to

[266] Ibid., 0:25:30-0:25:35.
[267] Ibid., 0:29:31-0:29:41.
[268] Ibid., 0:11:14-0:11:30.
[269] Ibid., 0:11:59-0:12:08.

Figure 4. Vincent wipes his name off the pillar while his parents cheer at Anton's quick growth. Still from *Gattaca*, directed by Andrew Niccol (Columbia Pictures, 1997). Access provided by Prime Video. Screenshot by the author.

become blood brothers, which Anton swiftly refuses. Those childhood misfortunes follow Vincent, haunt him even, and his parents certainly do not try to dispel any concerns that their first son is quite certainly developing regarding the notion of who he is and what he is able to do.Their love, admiration even, for Anton – for the perfect and unblemished child – feels to obscure their approach to Vincent which gradually turns from one predominantly based on concern to one running on diminishment of his dream. Antonio and Marie ask Vincent to remain realistic and to keep his health conditions in mind, above all. Antonio concludes, rather out of irritation, that the only way available to Vincent to see the spaceship would happen if he was cleaning it.[270] Constantly reminded that there will always be a better fit for the place that he holds so dear, the protagonist seems to wait for something impossible to happen and prove that he can go beyond the wounded notion that there is only so much he can do. That impossible moment does take place – the game of chicken played in the ocean ever since Vincent and Anton were little children suddenly shifts the power dynamics between the brothers. Suddenly it is not

[270] Ibid., 0:15:45-0:15:48.

Vincent who gets scared first and stops swimming. It is Anton. This situation becomes a form of momentum for the brother who, always inferior, completely unexpectedly takes the lead.

We follow Vincent leaving his family home and after a few years of working in different places, we finally see him enter Gattaca. Employing him as a janitor, a role that those accepted by Gattaca would never perform, Vincent's inferior genetic profile is yet again emphasized. Compared to employees who have been genetically enhanced to grant them the genetic material that would function as a pass to the company, Vincent's efforts to enhance himself fail miserably. Despite having earned all the knowledge needed to become part of the manned space mission to Titan that Gattaca is preparing for, as well as having changed his body significantly over the years of strenuous workouts to ensure its sturdiness needed for the mission, the only aspect taken into consideration during his job interviews is his invalid genetic material to be found in his blood or urine. Our protagonist decides to "resort to more extreme measures" to get closer to realising his dream.[271]

After doing some research, Vincent welcomes a character named German to his apartment. He introduces him to yet another discriminated and rejected social sphere. The visitor offers Vincent the possibility of going beyond his genetic profile and becoming a person commonly known in this future world as a "borrowed ladder" or a "de-gene-rate."[272] These labels concern a person who refuses to conform with what the in-valid genetic profile proves to result in: refuses to accept the limitations, the lack of opportunity, and the routine of being frowned upon. To do so in a world obsessed with and worshipping the importance of genetic material, such a renegade adorns oneself with valid genes. Essentially, such a rebel considers the genetic material as an instrument that would let them realise a specific aim. And as the physical construction of DNA – the so-called double helix – consists of two strands that twist around one another and start to resemble a form of a spiral ladder-like structure, hence

[271] *Gattaca,* 0:22:25-0:22:28.
[272] Ibid., 0:33:38-0:33:44.

the notion of a borrowed ladder emerges.[273] For Vincent, a "donor" of the right and anticipated in Gattaca genetic material becomes Jerome Eugene Morrow.

As we are confronted with close-up scenes that mount throughout the film, we can confirm our interpretations of what the company of Gattaca foregrounds.[274] The relationship between Jerome Eugene and Vincent starts to consist of the former providing samples of his superior genetic material: blood, urine, exfoliated skin, and hair. As Gattaca can only be entered through a security gate opened with a droplet of one's blood taken from the fingertip punctured with a needle, Vincent attaches sachets filled with Jerome Eugene's valid blood to his finger (fig. 5). As interviews in Gattaca turn out to consist merely of having one's urine checked, Vincent carries pouches attached to his thigh to be able to provide with the valid sample whenever it is needed (fig. 6). As Gattaca happens to construct itself as lacking any imperfections and appearing with an almost sterile-like tidiness, Vincent cleans his computer keyboard with a tiny vacuum cleaner – to ensure that his in-valid body matter remains invisible – and sprinkles it

Figure 5. Vincent fills a fingertip sachet with Jerome's blood to enter Gattaca. Still from *Gattaca*, directed by Andrew Niccol (Columbia Pictures, 1997). Access provided by Prime Video. Screenshot by the author.

[273] *National Human Genome Research Institute,* "Double helix," last updated on April 29, 2022, https://www.genome.gov/genetics-glossary/Double-Helix (accessed April 30, 2022).
[274] Simran Singh, "*Gattaca:* An Analysis," *Reel Rundown,* March 18, 2022, https://reelrundown.com/movies/An-analysis-on-the-film-Gattaca (accessed April 13, 2022).

Figure 6. Vincent opens a refrigerator filled with samples of Jerome's urine. Still from *Gattaca*, directed by Andrew Niccol (Columbia Pictures, 1997). Access provided by Prime Video. Screenshot by the author.

Figure 7. Jerome collects samples of his facial hair and skin to let Vincent carry it in vials and sprinkle his working spot with it. Still from *Gattaca*, directed by Andrew Niccol (Columbia Pictures, 1997). Access provided by Prime Video. Screenshot by the author.

with Jerome Eugene's exfoliated skin and shaven hair that he carries in vials (fig. 7).[275] Doing so turns out to be perfectly sufficient as what those responsible for testing at Gattaca see is the name of Jerome Eugene Morrow on their machines. Or, rather, what Gattaca sees is what Jerome Eugene's genetic profile was designed to carry:

> An expiration date you wouldn't believe. The guy's practically gonna live forever. He's got an IQ off the register, better than 20/20 in both eyes, the heart of an ox. He could run through a wall. If he could still run…[276]

Precisely. That is the brutal truth behind the relationship between Vincent and Jerome Eugene. The latter's genes were designed to ensure he becomes a swimming star, always meant to stand on the podium's highest step. His enhanced genetic profile was supposed to ensure his happiness, as we can say together with Coeckelbergh.[277] His destiny was written down in his genes. A destiny that is certainly promising, rendering him unblemished and born with the belief that his life's purpose is to remain ever-successful. That is why, as the supposedly impossible event of Jerome Eugene once finishing second happens, he turns out not to be able to come to terms with it. He opts for suicide by throwing himself in front of a racing car. Much to his dismay, his attempt is not successful, and he is forced to spend the rest of his life wheelchair-bound. His superior genetic profile ceases to suffice for the valid world.

This is a wound that surfaces for Jerome Eugene and us as those who come in contact with his character. No longer walking, no longer able to meet the expectations that have come with his genes, Jerome Eugene turns out to be no longer seen as a "fully-productive member of society."[278] Wounded by all the expectations placed upon him in the first place, he starts to embody yet another wound. This is the precise reason why his genetic identity turns into a form of a commodity for those for whom it might turn their in-valid life upside down. While Jerome Eugene provides Vincent with his body matter,

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[275] Kirk W. Junker, "*Gattaca:* defacing the future," *Futures* No. 31 (1999), 633.
[276] *Gattaca,* 0:24:00-0:24:26.
[277] Coeckelbergh, "Cyborg Humanity and the Technologies of Human Enhancement," 141.
[278] *Gattaca*, 0:25:04-0:25:07.

Vincent brings in money earned at Gattaca as a navigator that suffices for all that both need. The plan works out and, as we so well see, the almost inconspicuous ladder of DNA turns into an actual ladder that allows Vincent to climb the ranks that Gattaca has built to ensure that its missions are manned by "the right kind of people," as the company's director utters, full of pride.[279]

I will show that it is the subjectivity of Jerome Morrow that climbs this ladder successfully, which certainly is not an identity that Gattaca so intensely believes it to be. It is not an identity that belongs to one individual only, to only one body characterized by a valid genetic makeup. It is not a bounded identity formed only based on what the genetic profile brings, one that is "calculable, predictable, and manageable," as Jon Frauley puts it.[280] I argue that Jerome Morrow is not merely a stable identity. I see it as a posthuman performative subjectivity, merging the wounds that both Vincent lives with and those his partner in bringing his dream to realisation has always been embodying. I develop the notion of this subjectivity, of course, together with Braidotti and Barad. I see it as a composite assemblage[281] that invents itself upon infolding relations and negotiations.[282] I delve into this in the following section.

By noticing the wounds, we allow them to matter

VINCENT. I don't know how to thank you…
JEROME EUGENE. No, no, no. I got the better end of the deal.
I only lent you my body. You lent me your dream.[283]

To start, I address one issue regarding naming *Gattaca*'s characters, which I find crucial for my argumentation. As we have learned, Vincent's provider of a valid genetic identity shares not only his first name but also his middle name. We hear it as Jerome Eugene Morrow, the name which – rather not

[279] Ibid., 0:47:03-0:47:08.
[280] Jon Frauley, *Criminology, Deviance, and the Silver Screen: The Fictional Reality and the Criminological Imagination* (New York: Palgrave Macmillan, 2010), 196.
[281] Braidotti, "Posthuman Critical Theory," 19.
[282] Barad, "Posthumanist Performativity," 801-831.
[283] *Gattaca,* 1:37:03-1:37:17.

incidentally – can be translated as the one who bears a "sacred name," the one who was "well born," [284] the holder of "the best gene of tomorrow."[285] Jerome is the name that Vincent dons as an employee at Gattaca, while his partner in the undertaking asks him to call him by his middle name – as we have learned from the quote that the previous section started with. Doing so successfully ensures no confusion emerges between the names and those who introduce themselves to them in the film. Supported by the Jerome/Eugene distinction created in the film, I will embrace it to let my approach to Jerome Morrow as a posthuman performative subjectivity develop.

To begin, I want us to remind ourselves of the path that the previous sections have engaged with. I argue that following Vincent's steps allows us to spot different layers of woundedness piling up as the protagonist's life progresses. Vincent is "greeted" to the Gattacan world with a puncture even before he is held by his mother. His parents are not even able to welcome him with gratitude and happiness as they learn that their son is nothing more than a predetermined genetic profile characterised by detrimental health issues and inabilities. As we are already focusing on Vincent's parents, I would like us to let the discussion unfold from here. Their relationship with their first son is certainly not an easy one – undoubtedly desiring to enjoy the start of their parental journey and love their child as much as they can, they seem to be stripped of much of the happiness they want to experience. After all, it seems that their decision to conceive naturally turns out to be frowned upon by the society Vincent is born into.

Their decision becomes one resulting not only in a child's birth but also one that brings dramatic outcomes in the form of all the predicaments that Vincent is burdened with.[286] His father, just on the basis of hearing the genetic profile of his son being read, is not even able to gift him with his name. All the following behaviours that Marie and Antonio engage with as Vincent grows up can be argued to result from their will to shelter their child from rejection. After all, they were well aware of what kind of world Vincent will be born into; nevertheless, they opted for conceiving naturally. The parent-child

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[284] Name Jerome comes from the Greek name *Hieronymos,* which derives from *hieros* ('holy') and *onoma* ('name'). Name Eugene is based on the Greek name *Eugenios,* translating to 'well-born'. *Oxford Dictionary of First Names,* 2nd ed. Oxford University Press, 2019. Also available at https://www.oxfordreference.com/ (accessed April 30, 2022).
[285] "Morrow" is the archaic version of "tomorrow." Source: Kirby, "The New Eugenics in Cinema," 13.
[286] Gallardo-Torrano, "The Body as Utopia," 46.

relationship that *Gattaca* shares can be approached as a wounded one. Bearing both signs of love and care, burdened by the devastating results of not having followed the "natural" path of starting the parental journey, as well as haunted by the wound that we already know: that of genetic engineering facing us with incredibly troublesome questions. As Marie and Antonio cannot even enjoy Vincent's birth, they are starting to live the wound that the Gattacan world turns out to embody: reduction of individuals to their genetic code, or "geneticization" as epidemiologist Abby Lippman called it.[287] The parents seem to start living this wound when they hear how Vincent is perceived by the society they brought him to. They start to understand that the idea of what it means to bring a child to the world and what it means to be born changes completely as the world it happens in is obsessed with genetic engineering. Wounded, Marie and Antonio decide to bring their second child in the "proper" way.

With Anton, we follow the behind-the-scenes of how children are born in the Gattacan world. We see what is taken into account – or, rather, what parents are made to consider for the well-being of their future child. As we have found out from one of the quotes that the previous section introduced, conditions such as premature baldness, myopia or obesity are considered burdens to be avoided at all costs. Based on the scene showing the parent couple in conversation with a geneticist responsible for the birth of Anton, we learn how cleverly *Gattaca* introduces yet another wound that results from the obsession with genetic engineering: that desirable qualities, "a full head of hair, 20/20 vision, and low body weight," are necessary for a child to lead a happy and successful life.[288] It is the qualities – considered dependent on one's genes only – that, if enhanced, will not only make one "physically better […] but happier."[289] Noticing that the full responsibility of ensuring that Anton will be happy rests on their choice to choose good genes, Marie and Antonio seem to change their relationship to their second child fundamentally.

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[287] Kate Weiner et al., "Have we seen the geneticisation of society? Expectations and evidence," *Sociology of Health & Illness* Vol. 39, No. 7 (2017), 989.
[288] Kirby, "The New Eugenics in Cinema," 10.
[289] Coeckelbergh, "Cyborg Humanity and the Technologies of Human Enhancement," 141.

As Sascha Dickel sees it, because of the technology that the parents are entering a relationship with, they are "now accountable for every decision they take."[290] I would add to this by arguing that upon welcoming the perfect and unblemished Anton to their family, the parents' relationship with Vincent changes too. As I pointed out in the previous section, Vincent starts to embody a startling difference between the one who was born with the aid of technology and the one who was not. Always left behind, always somehow distant from his family members – not paid attention to when having his height measured or not sitting at the same table as they do – Vincent starts to embody the wound of how segregated, unwished-for, and ostracised the in-valid becomes. Thanks to the discourse provided by the film as well as thanks to the wounded literacy that we embody thanks to it, we might ask ourselves the following question: is it the child that is loved, respected, and accepted unconditionally or is it merely its genetic profile that influences the approach to this question?

I believe that we can see Anton as the first example of how a valid character can also be seen as wounded. Being born to and by the system "where body perfection is the norm, where in-valids are considered scientifically inferior," he turns out not to be able to form a brotherly relationship with Vincent.[291] He connects to his brother only based on his in-valid genetic profile. He opts for relationships supported by the quality of one's genes, which confirms how the Gattacan world damagingly influences the process of raising a child and its future ways of relating to the world – as the genetically enhanced, nothing more and nothing less. As a valid, since his childhood years, he seems to carry bias towards in-valids. He is unable to perceive them and connect to them in a manner otherwise than that based on the dichotomy. All those misfortunes, I argue, add to both the woundedness of genetic engineering and that of sci-fi cinema. They do not merely add to and support the already present discourses on those realms. I claim that they add to their woundedness and can in fact be seen as possible to be lived with rather than repulsed by and considered unjust.

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[290] Sascha Dickel, "Be Afraid of the Unmodified Body! The Social Construction of Risk in Enhancement Utopianism," in *The Human Enhancement Debate and Disability: New Bodies for a Better Life*, eds. Miriam Eilers, Katrin Grüber, and Christoph Rehmann-Sutter (London: Palgrave Macmillan UK, 2014), 233.
[291] Gallardo-Torrano, "The Body as Utopia," 51.

Finding liberation in the wound

All the wounds I have just introduced follow Vincent wherever he goes. I argue that those wounds become the momentum for his undertaking that would include entering Gattaca as someone completely different and letting him – as well as Eugene – become otherwise. Vincent's need to deny his identity of Vincent Freeman, on the one hand, can be seen as wounding the sense of self that he was born with. On the other hand, I can see it as a way of learning to live all the wounds the Gattacan world has developed. As Vincent says, "in the guise of Jerome Morrow," he was able to realise his dream, and I believe this success is not the only one we can notice as taking place in *Gattaca*.[292] By letting us see the developing relationship between Vincent and Eugene, the relationship that unfolds very much because of, but also weirdly thanks to, the importance of genetic engineering, we can notice how the two protagonists learn to live the wounds that have always been there for them. We already know what wounds Vincent lives through. With Eugene, the notion becomes even more entangled.

Born unblemished, with his future almost set in stone thanks to his carefully designed superior DNA, Eugene nevertheless suffers. For the valid character it is the perfection, supposed to ensure his happiness, that becomes a burden.[293] Supposed to lead his life towards a certain success, he experiences his failure to stand on the podium's highest step so intensely that it results in a breakdown. As the Gattacan world perceives an optimal genetic makeup as the only prerequisite for a happy life, Eugene's decision to commit suicide – and therefore to refuse the gift of his superior genes – excludes him from the society that he has been made for. He is forced to sell his genetic identity as it turns out that the Gattacan world does not care for providing any treatment – one that would, for example, aid Eugene in his breakdown that resulted in his failed suicide attempt.[294] His initial contacts with Vincent, as was the case with Anton, are predominantly wounded by contempt towards the in-valid that dares to believe that he would be able to be a valid member of society. The more he gets to know him though, the more

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[292] *Gattaca,* 0:33:50-0:33:51.
[293] Klohs, "More Human than Human!" 194.
[294] Frauley, *Criminology, Deviance, and the Silver Screen*, 214.

respectful he becomes as he notices the astonishing endurance that Vincent proves to carry on the path to starting his journey to Titan. Slowly and gradually, Vincent and Eugene develop a new set of behaviours, the final result of which would be an invention of Jerome Morrow. Vincent learns to identify himself at Gattaca not with the help of his photograph as he has been used to, but through sachets filled with Eugene's blood and pouches carrying his urine. Eugene, on the other hand, learns to share his superior body matter with the one who he has before considered as inferior. He learns that his genetically engineered body is not significant as he decides to self-immolate the moment Vincent starts his journey to Titan… This is how he finds peace.

As I promised in the first chapter, here I return to Bleeker's corporeal literacy concept. As she writes, the notion allows noticing "what […] technologies do to bodies and vice versa," how bodies create connections to what they encounter, how they relate to those encounters, and how they understand them.[295] Inspired by Noë, Bleeker argues that our interactions with technologies change our understandings of "*what we do,* what we *know how to do,* and what we *are ready to do,* and in doing so also transform modes of perceiving and thinking."[296] I find the notion of corporeal literacy particularly compelling to apply to the relation of Vincent and Eugene. I notice that all the new behaviours that the two characters develop should be seen as coming from the technology of genetic engineering that has become ubiquitous and controlling in the Gattacan world. Vincent becomes able to realise his dream by appropriating the behaviours that are the norm in Gattaca – blood and urine testing. With Eugene's help, he turns into an individual ready to enter Gattaca, the place that has always excluded him. When it comes to Eugene, he learns that his life does have a purpose and that his existence is not merely dependent on his genetic profile. As we hear him say to Vincent: "I only lent you my body. You lent me your dream," we can argue that his value system has been turned upside down. He learns that it is possible to become otherwise (fig. 8).[297] It is no longer his superior body matter that he perceives as

[295] Bleeker, "Corporeal Literacy," 32.
[296] Noë, *Action in Perception,* in Bleeker, "Corporeal Literacy," 38. Emphasis in original.
[297] *Gattaca,* 1:37:03-1:37:17.

Figure 8. Eugene showing Vincent all the body matter that he decided to gift the in-valid with. The striking amount of vials results from Eugene's decision to provide Vincent with samples that would last him at least two lifetimes. The scene takes place right before Eugene commits suicide. Still from *Gattaca*, directed by Andrew Niccol (Columbia Pictures, 1997). Access provided by Prime Video. Screenshot by the author.

central to who he is. Rather, it is who he has been able to become thanks to Vincent – an individual with an aspiration to become otherwise. When it comes to Vincent, we see him develop a deep connection with Eugene based on respect and care, which goes beyond seeing him as a valid individual only, reduced to his DNA material. Vincent learns he is not the only wounded one in the Gattacan world. He starts to appreciate the valid character from the perspective of his woundedness. He moves beyond the Gattacan understanding of the body as something that one has and moves towards "the lived body," the body that one is, as Coeckelbergh argues after Maurice Merleau-Ponty.[298] This is how Jerome Morrow as a posthuman performative subjectivity emerges. It is no longer an enhanced or a non-enhanced body that presupposes who one is. Neither it remains that stable and finite thing an individual has been given. It is no longer the body one has due to genetic engineering that is seen as crucial when entering a relationship with another or upon encountering an event. What proves to be a unit of reference here is nothing else but the wound. The wound that carries a liberating momentum.

[298] Coeckelbergh, "Cyborg Humanity," 149.

To conclude, I once again turn to the notion of posthuman performativity as brought by Barad. As we know, they begin their reflection by alluding to language that has become too powerful. In the case of *Gattaca*, I argue, it is the genetic profile that becomes its counterpart. The Gattacan world renders itself intelligible through the already known and controlled genetic material. As a result, we can say that the genetic profile turns into the matter that signifies: it is thanks to one's genes that one is granted agency. Therefore, the notion of who one can become, as not dependent on one's DNA, is neglected. From such a point of view, the individual is rendered passive, as their genetic profile already predetermines their destiny. Thanks to *Gattaca* and the unfolding relation between Vincent and Eugene, we can notice this wound. Embodying the wounded literacy ourselves – the literacy that makes us notice the technology of genetic engineering mediated by the sci-fi film as wounded – we can brace ourselves and intra-act with the already present and surfacing wounds in *Gattaca*.[299] Thanks to the wound, we can approach the matter of the film not as one having inherent attributes – or as embodying unshakeable discourses – but rather embrace it with a posthuman performative approach. I argue that our relationship with the film can be seen as a phenomenon that enables new ways of becoming otherwise, together with, and thanks to, the wound.[300]

The two figures - Vincent and Eugene – together with their wounds, become agents in the process of becoming Jerome Morrow. They have become corporeally literate based on the technological world that they had been born into. This new literacy influences how they relate to one another. The relationship, born out of recognition of woundedness, develops a posthuman performative subjectivity of Jerome Morrow. It is a newly developed subjectivity, consisting of the protagonists' behaviours and values that have become ubiquitous in the Gattacan world, of the machines used in the company to check the individual's validity. It consists of all the wounds that the future society lives through: of all the hierarchies, distinctions, and dichotomies that have resulted from treating genetic profiles as the only marker of an individual's worth. It is a subjectivity that, in Barad's words, incorporates "material and

[299] Barad, *Meeting the Universe Halfway*, 33.
[300] Ibid.

discursive, social and scientific, human and nonhuman, natural and cultural factors."[301] The subjectivity of Jerome Morrow goes against the idea that genes provide an individual with a stable identity predetermined by one's genetic profile. It goes beyond the notion of seeing the world through the prism of a pristine human identity. Jerome Morrow can be seen not as an identity that is finite upon one's birth but rather as an intra-action: a relational process that comes into being based on relations between human (Vincent and Eugene) as well as nonhuman bodies (all technologically inspired behaviours, the blood sachets, urine pouches, vials with exfoliated skin and hair). Jerome Morrow comes into being out of unison that was rendered possible by lived wounds of a genetically engineered body and genetic engineering as a practice. We can notice it thanks to our wounded literacy of sci-fi cinema and genetic engineering. The wounds from which Jerome Morrow's subjectivity is invented do not belong to Vincent or Eugene only. We are also embodying them.

To remind ourselves of Dolphijn's thoughts: "there is nothing personal" about the wound; it is always shared.[302] All the wounds Jerome Morrow is invented from have already been embodied by the practice of genetic engineering and by the society that has deemed it prime. All the dichotomies we see emerging in *Gattaca,* the boundaries, and the misunderstandings have already existed when Vincent and Eugene entered their relationship. Eugene was already living with the burden of his body being designed for one particular purpose, with exaggerated expectations that society has put upon him, with the body that was supposed to bring him calmness and happiness but brought him the complete opposite. Vincent embodies all that is not to be realised just because he was not born with the aid of technology. He lives with the notion that his worth is seen through the prism of his health issues which would not have been the case had he been a result of screening of candidates represented by several fertilized eggs. This is why Jerome Morrow, the posthuman performative subjectivity, can indeed join Bousquet when he says: "My wound existed before me, I was born to embody it."[303] This subjectivity allows spotting, embracing, and living the wounds we have seen to characterise the Gattacan world. *Gattaca* is a film that

[301] Barad, "Posthumanist Performativity," 815.
[302] Dolphijn, *The Philosophy of Matter*, 91.
[303] Deleuze, *The Logic of Sense*, 148.

very successfully manages to repeat the distinction between body and mind by bringing yet another dichotomy between the valid and in-valid. It shows that thanks to repeating a form of a transhuman belief that the notion of a happy life will only be possible to attain when one's abilities are genetically enhanced.[304] Our discussion on the subjectivity of Jerome Morrow brings both an appreciation of the film's boldness[305] to touch upon the ethics of genetic enhancement, as well as offers us a chance of becoming worthy of our present.[306]

Gattaca allows us to see that the human will to overcome vulnerability has always been there, and while it feels to be guided towards getting rid of wounds, it in fact makes us aware of all the perhaps hidden wounds that can emerge. Through familiarising ourselves with the relationships that Vincent Freeman enters, we can see that while the dichotomies that we so well know have resulted in racism or sexism are argued not to be present in Gattaca, the society turns out not to be a perfect, unbiased one.[307] On the contrary, it is actually running on yet another hierarchy and dichotomy – one that it created and allowed to emerge – geneticism. While it may not be visible, it is always already there, for every member of the society – even for those who were not born yet. Every individual in the Gattacan world lives this wound. The dichotomies are already there in place, and there is an understanding of what is most important in recognising an individual, their worth, social position, and abilities.

Vincent and Eugene show that their wounds will never heal and will always be there. Just like the wounds of genetic engineering and science fiction cinema. They will always be already there, and they will never heal. Our wounded literacies will never heal either. That does not mean that they should go unnoticed, untaken care of; neither does that mean that we should carry our lives with bitterness. Not at all, as the wounds are simply in need of care. Care in the form of recognition that there is evil that can emerge, but that does not mean that this evil should necessarily be realised. Perhaps time will not heal those wounds but will open our eyes to one another's wounds. Perhaps from now on, we will

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304 Coeckelbergh 2017, 151.
305 Kirby 2000, 10.
306 Braidotti, *The Posthuman*, 189.
307 "I belonged to a new underclass, no longer determined by social status or the color of your skin. […] No, we now have discrimination down to a science." *Gattaca,* 0:19:02-0:19:14.

affirmatively notice how wounds of the one emerge in the presence of the other, as Jerome Morrow shows us. Having seen *Gattaca*, we can now say that we are all wounded.[308] We might want to ask whether we want to live the wound of yet another dichotomy of valid and in-valid, of simplification that comes when genes become superior. This wound has always been there, and always will be as the promise that *Gattaca* brought in 1997 slowly becomes a reality nowadays. I would argue that the sign of maturation towards the practice of genetic engineering and sci-fi cinema can take a form of recognition of what these realms bring not as a threat or danger, but rather as in need of acceptance, care, and embracement: as wounds that we are living with after all. The human desire to perfect oneself has always been there – perhaps now is the very right moment to think with Jerome Morrow and wonder what we mean with this perfection.[309]

[308] Niccol, *Gattaca* script, 115.
[309] Gallardo-Torrano, "The Body as Utopia," 45.

Conclusion

Wounds, if embraced, can allow us to reinvent our subjectivity

Thanks to the posthuman performative subjectivity of Jerome Morrow, we learn that something completely new can emerge upon the wound. We can develop a new way of thinking, relating, becoming with, and becoming otherwise. For us, it might mean becoming otherwise upon wounds that we have already been embodying and are now learning to embrace with no bitterness but, rather, with unbiased alertness. From now on, we can enter a path towards developing a posthuman performative subjectivity that forms upon wounds that are certainly not repugnant but carry a liberating power.

Throughout this thesis, I have shown that we have always been wounded. By starting my discussion by alluding to interpretations of *Blade Runner* and *Gattaca*, ones that I do not sympathise with, I had a clear purpose in mind. It was to start thinking with what is already there: with all the different misfortunes, but eschewing thoughts filled with bitterness, grudge-bearing, and thoughts arguing that there is something unjust happening to us. The notion of the Replicant as an embodiment of nothing else but a threatening technology, as well as one of the in-valid character as one that suffers discrimination as a result of that very same technology functioned as starting points for me. To work with those predicaments, I started to search for concepts and thoughts that I would treat as companions when developing my argumentation.

My contribution offered the concept of the wound as one thanks to which an exploration of possibilities of thinking otherwise could surface. The notion has become a recurring theme throughout my writing. Embraced especially thanks to Joë Bousquet's musings on the notion, I learned that the wound should not be understood as a mere deficiency that irritates us. Instead, it has become an attribute that we can don, an agent that we can think with while looking for something meaningful in all the misfortunes that face us. The genetic engineering technology, as a result of the Asilomar Conference, might have remained that threatening technology whose purpose can only be understood through the prism of whether it should be embraced or not. Science fiction films might have remained demonising and repugnant works whose sole purpose is to let us approach the question of what it means to be human. My concept of wounded literacy – understood as a particular condition of making sense – has been traced and has allowed us to notice such pessimistic interpretations as nothing to be repulsed by. In

fact, we learned that thanks to our woundedness, we can become worthy of our misfortunes: of the interpretations, tropes, and dichotomies that are already there and that will never heal.

The discourse on genetic engineering technology embodies the wound of seeing everything through the prism of the notions of human identity and essence. Such notions, if performing the role of a unit of reference, turn out to hamper ways of thinking of the technology as something otherwise than either beneficial or hazardous. This technology is far too subtle to approach from the perspective of a question that is such a simplifying one. At the moment, we might not be able to come up with *the* question and *the* answer that would sound more satisfying, but perhaps that is not the priority. Right now, we are those who have already been becoming with science fiction films when thinking about emerging technologies. As we learned, interpretations that are already there might not have been gifting us with anything generous. Nevertheless, we have seen that this cinematic genre is not to be seen as providing us with straightforward thoughts and approaches.

Thanks to choosing *Blade Runner* and *Gattaca*, I have been able to show that the question that emerges is not who one is but rather how one becomes upon the wound and how subjectivity develops alongside. I have treated my case studies as companions in the quest to look beyond the notion of a stable human identity as a preferred unit of reference. I have approached both of them as embodying different wounds. Thanks to them, I have been able to show that our wounded literacy can be traced, embraced, and can start to function as a basis for developing a mode of unbiased alertness to what is already there. Thanks to tracing different wounds as surfacing in the films, I have been able to offer a new unit of reference upon which the elaboration on the concept of posthuman performative subjectivity could emerge. I have traced this concept as already present in *Blade Runner*, however suffocated by what has already been there in the form of demonising interpretations. *Gattaca* has proven an ideal companion in expanding the notion of posthuman performative subjectivity. The notion allowed us to notice the misfortunes characterising the film not as something vile but rather as wounded: as that which we can embrace as we are wounded ourselves.

It is the wound that allows for developing a posthuman performative subjectivity: of the film characters, as well as of us as those who watch those films. Just like Rick Deckard, Vincent Freeman, or Eugene Morrow, we are not made to lead our lives with predetermined characteristics. Instead, we should become otherwise together with Jerome Morrow – a posthuman performative subjectivity par excellence. If we ever feel insecure about the process, there is one thing that we can remain confident about: the wound will always be there, will never leave us alone, will always be shared, and will always allow for coming together.

I am sure my thesis does not provide an all-inclusive analysis of the wounds of genetic engineering and their mediation in science fiction cinema. Certainly, more wounds can surface and can let us continue reinventing our subjectivity. My analysis did not focus on all the film characters, as well as focused predominantly on male characters; I believe that it will count to think more about female characters that we encounter thanks to *Blade Runner* and *Gattaca.* One might also wonder about delving into an analysis of environmental aspects as they emerge in the films in the form of gloomy Los Angeles and spotless Gattaca Corporation. Definitely, one might also think about formal aspects of camera work, as well as engage with an analysis inspired by affect theories to focus more on the role of the audience. I believe that thanks to the wound as our new unit of reference, possibilities of thinking otherwise are endless.

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Bibliography

Arber, Werner and Mathis Brauchbar. "Biotechnology for the 21st century." In *21st Century Technologies: Promises and Perils of a Dynamic Future*, edited by Organisation for Economic Co-operation and Development, 77-96. Paris: OECD Publications, 1998.

Barad, Karen. "Posthumanist Performativity: Toward an Understanding of How Matter Comes to Matter." *Signs* Vol. 28, No. 3(2003): 801–31.

Barad, Karen. *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*. Durham: Duke University Press, 2007.

Baylis, Françoise. "Human Genome Editing: Our Future Belongs to All of Us." *Issues in Science and Technology* Vol. 35, No. 3 (2019): 42-44.

Begley, Varun. "*Blade Runner* and the Postmodern: A Reconsideration." *Literature/Film Quarterly* Vol 32, No. 3 (2004): 186-192.

Berg, Paul et al. "Summary Statement of the Asilomar Conference on Recombinant DNA Molecules." *Proceedings of the National Academy of Sciences of the United States of America* Vol. 72, No. 6 (1975): 1981-1984.

Berg, Paul. "Asilomar 1975: DNA modification secured." *Nature* Vol. 455 (2008): 290-291.

Bertek, Tihana. "The Authenticity of the Replica: A Post-Human Reading of Blade Runner." *[Sic] - a Journal of Literature, Culture and Literary Translation* No. 1 (2014): 1-12.

Best, Steven and Douglas Kellner. "Biotechnology, Ethics and the Politics of Cloning." *Democracy and Nature* Vol. 8, No. 3 (2002): 439-465.

Bleeker, Maaike. "Corporeal Literacy." In *Re_Visioning Bodies,* edited by Daniel Neugebauer, 28-41. Spector Books: Leipzig, 2022.

Bostrom, Nick. "Human Genetic Enhancements: A Transhumanist Perspective." *The Journal of Value Inquiry* Vol. 37, No. 4 (2003): 493-506.

Bostrom, Nick. „Transhumanism: The World's Most Dangerous Idea?" *Nick Bostrom*, 2004. https://www.nickbostrom.com/papers/dangerous.html (accessed May 12, 2022).

Braidotti, Rosi. "Discontinuous Becomings. Deleuze on the Becoming-Woman of Philosophy." *Journal of the British Society for Phenomenology* Vol. 24, No. 1 (1993): 44-55.

Braidotti, Rosi. "Posthuman Critical Theory." In *Critical Posthumanism and Planetary Futures,* eds. Debashish Banerji and Makarand R. Paranjape. Springer, 2016.

Braidotti, Rosi. *Nomadic Theory: The Portable Rosi Braidotti.* New York: Columbia University Press, 2011.

Braidotti, Rosi. *The Posthuman.* Cambridge: Polity Press, 2013.

Carbonell, Curtis D. "A Contest of Tropes: Screened Posthuman Subjectivities." In *The Palgrave Handbook of Posthumanism in Film and Television,* edited by Michael Hauskeller, Thomas D. Philbeck and Curtis D. Carbonell, 153-162. London: Palgrave Macmillan, 2015.

Causey, Matthew. "The Object of Desire of the Machine and the Biopolitics of the Posthuman." In *Resisting Biopolitics: Philosophical, Political, and Performative Strategies*, edited by S.E. Wilmer and Audronė Žukauskaitė, 202-215. New York: Routledge, 2016.

Coeckelbergh, Mark. "Cyborg Humanity and the Technologies of Human Enhancement." In *Philosophy: Technology,* edited by Anthony Beavers, 141-160. Macmillan Reference USA, 2017.

Coeckelbergh, Mark. "Enhancement and the vulnerable body: Questioning some philosophical assumptions." In *Beyond Therapy v. Enhancement? Multidisciplinary analyses of a heated debate,* edited by Federica Lucivero and Anton Vedder, 15-26. Pisa: Pisa University Press, 2013.

Coeckelbergh, Mark. "Vulnerable Cyborgs: Learning to Live with our Dragons." *Journal of Evolution and Technology* Vol. 22, No. 1 (2011): 1-9.

Coeckelbergh, Mark. *Human Being @ Risk: Enhancement, Technology, and the Evaluation of Vulnerability Transformations.* Dordrecht: Springer, 2013.

Cornea, Christine. "Figurations of the Cyborg in Contemporary Science Fiction Novels and Film." In *A Companion to Science Fiction,* edited by David Seed, 275-288. Malden: Blackwell Publishing, 2005.

Critchley, Christine et al. "Predicting Public Attitudes Toward Gene Editing of Germlines: The Impact of Moral and Hereditary Concern in Human and Animal Applications." *Frontiers in Genetics* Vol. 9 (2019): 1-14.

Cullen, Jason. "The Wounds of Indetermination: Deleuze, *Cinema* and Ethology."PhD diss., The University of Queensland, 2013.

Cyranoski, David and Sara Reardon. "Chinese scientists genetically modify human embryos." *Nature,* April 22, 2015. https://www.nature.com/articles/nature.2015.17378 (accessed May 14, 2022).

Deleuze, Gilles. *Empiricism and Subjectivity: An Essay on Hume's Theory of Human Nature.* New York: Columbia University Press, 1991. First published in 1953 by Presses Universitaires de France.

Deleuze, Gilles. *The Logic of Sense.* London: The Athlone Press, 1990. First published in 1969 by Les Editions de Minuit.

Dibdin, Emma. "Is *Blade Runner*'s Deckard a replicant? Ridley Scott's definitive answer." *Digital Spy.* December 15, 2014. https://www.digitalspy.com/movies/a616639/is-blade-runners-deckard-a-replicant-ridley-scotts-definitive-answer/ (accessed March 22, 2022).

Dickel, Sascha. "Be Afraid of the Unmodified Body! The Social Construction of Risk in Enhancement Utopianism." In *The Human Enhancement Debate and Disability: New Bodies for a Better Life*, edited by Miriam Eilers, Katrin Grüber, and Christoph Rehmann-Sutter, 227-244. London: Palgrave Macmillan UK, 2014.

Dickenson, Donna and Marcy Darnovsky. "Did a permissive scientific culture encourage the 'CRISPR babies' experiment?" *Nature Biotechnology* Vol. 37 (2019): 355-357.

Dinello, Daniel. *Technophobia! Science Fiction Visions of Posthuman Technology*. Austin: University of Texas Press, 2005.

Dolphijn, Rick. "The Cracks of the Contemporary." In Vanina Hofman and Pau Alsina, "Art and speculative futures," *Artnodes* No. 19 (2017): 16-20.

Dolphijn, Rick. *The Philosophy of Matter: A Meditation.* London: Bloomsbury Academic, 2021.

Domaradzki, Jan. "Popular Culture and Genetics: Genetics and Biotechnologies in the Movies." *Polish Sociological Review* Vol. 215, No. 3 (2021): 281–310.

Donna J. Haraway, *Staying with the Trouble: Making Kin in the Chthulucene* (Durham: Duke University Press, 2016).

Doudna, Jennifer A. and Samuel H. Sternberg. *A Crack in Creation: Gene Editing and the Unthinkable Power to Control Evolution.* Boston: Houghton Mifflin Harcourt, 2017.

Flisfeder, Matthew. *Postmodern Theory and Blade Runner*. New York: Bloomsbury Publishing, 2017.

Florence, Maurice. "Foucault." In *Essential works of Foucault.* Vol. 2, *Aesthetics, Method, and Epistemology,* edited by James D. Faubion, 459-463. New York: The New Press, 1998.

Foucault, Michel. "The Order of Discourse." In *Untying the Text: A Post-Structuralist Reader* [1971], edited by Robert Young, 51-78. Boston: Routledge & Kegan Paul, 1981.

Foucault, Michel. *The Archaeology of Knowledge and the Discourse on Language.* Tavistock Publications Limited, 1972. First published in 1971 by Editions Gallimard.

Frauley, Jon. *Criminology, Deviance, and the Silver Screen: The Fictional Reality and the Criminological Imagination.* New York: Palgrave Macmillan, 2010.

Frayling, Christopher. *Mad, Bad and Dangerous? The Scientist and the Cinema.* London: Reaktion Books, 2005.

Fukuyama, Francis. "Transhumanism." *Foreign Policy.* October 23, 2009. https://foreignpolicy.com/2009/10/23/transhumanism/ (accessed May 12, 2022).

Fukuyama, Francis. *Our Posthuman Future: Consequences of the Biotechnology Revolution*. New York: Farrar, Strauss and Giroux, 2002.

Gallardo-Torrano, Pere. "The Body as Utopia: *Gattaca*, by Andrew Niccol (1997)." *Spaces of Utopia: An Electronic Journal*, No. 5 (20070: 44-54.

Goleman, Daniel. "What is Emotional Self-Awareness?" *Korn Ferry.* 2022. https://www.kornferry.com/insights/this-week-in-leadership/what-is-emotional-self-awareness (accessed April 7, 2022).

Gomel, Elana. "Science (Fiction) and Posthuman Ethics: Redefining the Human." *The European Legacy* Vol. 16, No. 3 (2011): 339-354.

Gonzalez, Cristina. "The importance of self-awareness and emotional intelligence in young adults." *Marbella International University Centre.* March 24, 2020. https://miuc.org/self-awareness-and-emotional-intelligence-in-young-adults/ (accessed April 7, 2022).

Greenwald, Ted. "Q&A: Ridley Scott Has Finally Created the *Blade Runner* He Always Imagined." *Wired.* September 26, 2007. https://www.wired.com/2007/09/ff-bladerunner/ (accessed March 21, 2022).

Haraway, Donna J. *Staying with the Trouble: Making Kin in the Chthulucene.* Durham: Duke University Press, 2016.

Heller, Jean. "AP was there: Black men untreated in Tuskegee Syphilis Study." *AP News.* May 10, 2017. https://apnews.com/article/business-science-health-race-and-ethnicity-syphilis-e9dd07eaa4e74052878a68132cd3803a (accessed July 18, 2022).

Hogan, Andrew J. "From Precaution to Peril: Public Relations Across Forty Years of Genetic Engineering." *Endeavour* Vol. 40, No. 4 (2016), 218-222.

Hood, Cooper. "*Blade Runner*'s Multiple Cuts (& Differences) Explained." *Screenrant.* June 8, 2020. https://screenrant.com/blade-runner-movie-multiple-versions-cuts-differences-explained/ (accessed March 14, 2022).

Junker, Kirk W. "*Gattaca:* defacing the future." *Futures* No. 31 (1999): 631-635.

Kerman, Judith B. ed. *Retrofitting "Blade Runner:" Issues in Ridley Scott's "Blade Runner" and Philip K. Dick's "Do Androids Dream of Electric Sheep?"* Wisconsin: The University of Wisconsin Press, 1991.

Khalid, Nabeeha and Mahzad Azimpouran. "Necrosis." *The National Center for Biotechnology Information.* Last updated on March 9, 2022. https://www.ncbi.nlm.nih.gov/books/NBK557627/ (accessed July 8, 2022).

Kirby, David A. "Science and Technology in Film: Themes and Representations." In *Routledge Handbook of Public Communication of Science and Technology,* edited by Massimiano Bucchi and Brian Trench), 97-112. New York: Routledge, 2014.

Kirby, David A. "The New Eugenics in Cinema: Genetic Determinism and Gene Therapy in *GATTACA*." *Science Fiction Studies* Vol. 27, No. 2 (2000): 193-215.

Klohs, Kathrin. "More Human than Human!: How Recent Hollywood Films Depict Enhancement Technologies — And Why." In *The Human Enhancement Debate and Disability: New Bodies for a Better Life*, edited by Miriam Eilers, Katrin Grüber, and Christoph Rehmann-Sutter, 183–203. London: Palgrave Macmillan UK, 2014.

Lacey, Nick. "Postmodern Romance: The Impossibility of (De)centring the Self." In *The* Blade Runner *Experience: The Legacy of a Science Fiction Classic*, edited by Will Brooker, 190-199. New York: Wallflower Press, 2005.

Lundgren, Magnus, Emmanuelle Charpentier, and Peter C. Fineran, eds. *CRISPR: Methods and Protocols.* New York: Humana Press, 2015.

McElheny, Victor K. "World Biologists Tighten Rules On 'Genetic Engineering' Work." *The New York Times*. February 28, 1975. https://www.nytimes.com/1975/02/28/archives/world-biologists-tighten-rules-on-genetic-engineering-work-world.html (accessed May 17, 2022).

Meyer, Angela, Amelie Cserer, and Markus Schmidt. "Frankenstein 2.0.: Identifying and characterising synthetic biology engineers in science fiction films. *Life Sciences, Society and Policy* Vol. 9, No. 9 (2013): 1-17.

Michael Moe et al. "Made to Order." *A2Apple*. December 17, 2017. https://www.a2apple.com/made-to-order/ (accessed April 27, 2022).

Morin, Alain. "Self-Awareness Part 1: Defintion, Measures, Effects, Functions, and Antecedents." *Social and Personality Psychology Compass* Vol. 5, No. 10 (2011): 807-823.

Nancy, Jean-Luc and Susan Hanson. "L'Intrus." *CR: The New Centennial Review* Vol. 2, No. 3 (2002): 1–14.

National Cancer Institute. "Adenine." https://www.cancer.gov/publications/dictionaries/cancer-terms/def/adenine (accessed April 28, 2022).

National Human Genome Research Institute. "Double helix." Last updated on April 29, 2022. https://www.genome.gov/genetics-glossary/Double-Helix (accessed April 30, 2022).

Niccol, Andrew M. *Untitled*. [*Gattaca* script]. Film script. 1997. https://thescriptsavant.com/pdf/Gattaca.pdf (accessed April 27, 2022).

Niccol, Andrew M., director. *Gattaca*. Columbia Pictures, 1997. https://www.primevideo.com/detail/0GQGTTMJCM1PDHQWANMLX1WCPS/ref=atv_sr_fle_c_Tn74RA_1_1_1?sr=1-1&pageTypeIdSource=ASIN&pageTypeId=B06XTZFC45&qid=1657355668.

Noë, Alva. *Action in Perception*. Cambridge, Massachusetts: The MIT Press, 2004.

O'Mathúna, Dónal P. "Autonomous Fighting Machines: Narratives and Ethics." In *The Palgrave Handbook of Posthumanism in Film and Television,* edited by Michael Hauskeller, Thomas D. Philbeck and Curtis D. Carbonell, 141-149. London: Palgrave Macmillan, 2015.

Ong, Walter. *Orality and Literacy: The Technologizing of the World*. London and New York: Routledge, 1988.

Pascoe, Joanna. "Posthuman Heroes." *Heroism Science: An Interdisciplinary Journal* Vol. 4, No. 2 (2019): 1-14.

Perkowitz, Sidney. *Hollywood Science: Movies, Science, and the End of the World*. New York: Columbia University Press, 2007.

Reynolds, David. "Being Post-Human in Ridley Scott's *Blade Runner*." *Reynolds' Thoughts and Fictions* (blog). October 13, 2014, https://davaflava.wordpress.com/2014/10/13/being-post-human-in-ridley-scotts-blade-runner/ (accessed March 21, 2022).

Rifkin, Jeremy. *The Biotech Century*. New York: Penguin/Putnam, 1998.

Rivero-Vadillo, Alejandro. "Dissident Cyber-Galateas on Screen: A Posthumanist Analysis of *Blade Runner* and *Per Aspera Ad Astra*." *Mundo Eslavo* No. 19 (2020): 195-212.

Ronchi, Rocco. "The Wounded Poet: On the Twenty-First Series of Deleuze's *Logic of Sense."* In *The Wounded Body: Memory, Language and the Self from Petrarch to Shakespeare,* edited by Fabrizio Bondi, Massimo Stella, and Andrea Torre, 11-27. Cham: Palgrave Macmillan, 2022.

Rustagi, Vasu. "What is Frankenstein food?" *The Times of India*. March 17, 2007. https://timesofindia.indiatimes.com/what-is-frankenstein-food/articleshow/1775269.cms (accessed July 6, 2022).

Scott, Ridley, director. *Blade Runner*. Warner Bros. Pictures, 1982/1992. https://rakuten.tv/nl/movies/blade-runner-director-s-cut?q=blade%20runner%20director%27s%20cut.

Seigworth, Gregory J. and Melissa Gregg. "An Inventory of Shimmers." In *The Affect Theory Reader,* edited by Gregory J. Seigworth and Melissa Gregg, 1-25. Durham: Duke University Press, 2010.

Shaviro, Steven. *Extreme Fabulations: Science Fictions of Life*. London: Goldsmiths Press, 2021.

Singh, Simran. "*Gattaca:* An Analysis." *Reel Rundown*. March 18, 2022. https://reelrundown.com/movies/An-analysis-on-the-film-Gattaca (accessed April 13, 2022).

Smelik, Anneke. "Film." In *The Cambridge Companion to Literature and the Posthuman,* edited by Bruce Clarke and Manuela Rossini, 109-120. Cambridge: Cambridge University Press, 2017.

Smith, John E. *Biotechnology*. New York: Cambridge University Press, 2012.

Smith, Terry. *Talking Contemporary Curating*. New York: Independent Curators International, 2015.

Sobchack, Vivian. "American Science Fiction Film: An Overview." In *A Companion to Science Fiction,* edited by David Seed, 261-274. Malden: Blackwell Publishing, 2005.

Stacey, Jackie. *The Cinematic Life of the Gene*. Durham: Duke University Press, 2010.

Stock, Gregory. *Redesigning Humans: Our Inevitable Genetic Future*. Boston: Houghton Mifflin Harcourt, 2002.

Sullivan, Nikki. "Somatechnics, or Monstrosity Unbound." *Scan | Journal of Media Arts Culture* Vol. 3, No. 3 (2006).

Synthego. "CRISPR Cancer Research." *Synthego*. https://www.synthego.com/crispr-cancer (accessed July 8, 2022).

Synthego. "Sickle Cell Gene Therapy Using CRISPR." *Synthego*. https://www.synthego.com/crispr-sickle-cell-disease (accessed July 8, 2022).

Weiner, Kate et al. "Have we seen the geneticisation of society? Expectations and evidence." *Sociology of Health & Illness* Vol. 39, No. 7 (2017): 989-1004.

Wilmink, Robbert et al. "Becoming." *The Human Geography Knowledge Base*. Last modified on November 3, 2011. http://geography.ruhosting.nl/geography/index.php?title=Gilles_Deleuze#Becoming (accessed July 5, 2022).

Wołodźko, Agnieszka A. "Bodies within Affect: On Practicing Contaminating Matters through Bioart." PhD diss., Leiden University, 2018.

Yam, Philip. "Clean Genes." *Scientific American* Vol. 277, No. 4 (1997): 153-154.

Zwijnenberg, Robert. "Biotechnology, Human Dignity, and the Importance of Art." *Teoria* Vol. 34, No. 1 (2014): 131-148.