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**The Cyborg and the Construction of Prosthetic Memory in Three Episodes of *Black Mirror***

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Jéssica Katerine Molgero Da Rós

**The Cyborg and the Construction of Prosthetic Memory in Three Episodes of *Black Mirror***

O presente trabalho em nível de mestrado foi avaliado e aprovado por banca examinadora composta pelos seguintes membros:

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Certificamos que esta é a **versão original e final** do trabalho de conclusão que foi julgado adequado para obtenção do título de Mestre em Inglês: Estudos Linguísticos e Literários.

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## ABSTRACT

This study examines three episodes from the series *Black Mirror*, namely *The Entire History of You* (2011), *Arkangel* (2017), and *Crocodile* (2017), with the aim of analyzing how these science fiction stories' technology constructs the so-called prosthetic memory (LANDSBERG, 2004), and how this new form of memory relates to the panoptic model, the disciplinary society (FOUCAULT, 1977) and also the society of control (DELEUZE, 1992). The argument I make throughout this study is that the prosthetic memory serves as a form of establishing new modes of surveillance and control, since the cyborg condition of the characters allows them to have a different access to memory, and, by transforming the once natural memories in consumable images, in prosthetic memories, these images are consequently used to establish power relations similar to the ones spotted in the panoptic model (watcher/watched). To develop the analysis, I focused on the construction of the scenes in which the prosthetic memory is shown at use and also on the scenes in which the consequences of its use are approached. Based on a posthuman perspective (BRAIDOTTI, 2013; NAYAR, 2014; HAYLES, 1999; and HARAWAY, 2000), I investigate how the cyborg characters develop a posthuman panopticon with the aid of prosthetic memories.

**Keywords:** *Black Mirror*, Posthumanism, Prosthetic Memory, Panopticon.

## RESUMO

O presente estudo examina três episódios da série *Black Mirror*, respectivamente *The Entire History of You* (2011), *Arkangel* (2017) e *Crocodile* (2017), com o objetivo de analisar como a tecnologia dessas histórias de ficção científica constrói a chamada memória protética (LANDSBERG, 2004), e como essa nova forma de memória se relaciona com o modelo panóptico, com a sociedade disciplinar (FOUCAULT, 1977) e também com a sociedade de controle (DELEUZE, 1992). O argumento que apresento neste estudo é que a memória protética serve como uma forma de estabelecer novos modos de vigilância e controle, uma vez que a condição de ciborgue dos personagens permite que eles tenham um acesso diferente às suas memórias, e, ao transformar as memórias antes naturais em imagens a serem consumidas, em memórias protéticas, essas imagens conseqüentemente são utilizadas para estabelecer relações de poder semelhantes às encontradas no modelo panóptico (a relação de observador/observado). Para desenvolver a análise, foquei na construção das cenas em que a memória protética é mostrada em uso e também nas cenas em que são abordadas as conseqüências de seu uso. Embasado em uma perspectiva pós-humana (BRAIDOTTI, 2013; NAYAR, 2014; HAYLES, 1999; e HARAWAY, 2000), este estudo investiga como os personagens ciborgues desenvolvem o que chamo de panóptico pós-humano com o auxílio de memórias protéticas.

**Palavras-chave:** *Black Mirror*, Pós-humanismo, Memória Protética, Panóptico.



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## 1 INTRODUCTION

Mirrors are objects responsible for carrying symbols of different mythologies across the ages, from Ancient Greek mythology and Narcissus' self-discovery with the natural mirror formed on the water surface, to the Magic Mirrors in Brother's Grimm's fairy tales. Mirrors have been watching human developments, as much as humans have been watching themselves on the mirrors. Somehow, this object is deeply connected to humans' vanity and self-contemplation. Mirrors and their different shapes are also symbols for the possibility of distortion of reality, by transforming the way the reflected object is represented. The house of mirrors, a very interesting attraction commonly found in amusement parks, is a good example of how the mirrored reflections can pursue an effect on reality. Some houses of mirrors are composed of different surfaces, varied in their concave and convex shapes, which literally can distort people's images, turning their other self in the mirror into shorter or taller figures, for instance. Other kinds of houses of mirrors are constructed with the intent to form a maze of mirrors, whose encountering images make it extremely difficult for one to find the real way out of the maze. Therefore, in different situations, mirrors are symbols of a variety of beliefs, but it is still and mostly known as responsible for representing reality.

Modern times, specifically the 20<sup>th</sup> and 21<sup>st</sup> centuries, along with the digital technological developments, construct a different perspective of the mirror. Many surfaces of the technology itself, like the television, the smartphones and other electronic devices' screens, are able to produce a reflection of those who observe it. When turned off, these electronic devices turn into black mirrors, referring to the image of their darkened reflective screens, in which it becomes possible to see the image of those who are looking at their surface. From this modern and digital perspective, the mirror not only means the reflective surfaces, but it also approaches a metaphorical meaning, since, in its virtual and digital form, these new mirrors also attempt to reconstruct reality somehow. The black mirror of the screens, then, becomes another form of contemplation, derived from the screen in which we are already familiarized with seeing the representation of our reality, whether it be on television programming and on the news, or, more fictionally, on movies and series. These screens not only enable people to see themselves on them as a literal mirror, but also creates a site for a metaphorical mirroring. The metaphorical mirror in this modern technological dimension also made possible for people to reflect on their lives as they are constantly affected by this contact with a representation of reality.

The series *Black Mirror*, then, appropriates in its name the concept of the black mirror of the turned-off screens and the metaphorical meaning of a dark reflection of reality. *Black Mirror* is a science fiction series whose episodes focus particularly on the uses and consequences of technology in the modern society. *Black Mirror* premiered in 2011, being produced by Channel 4, which was responsible for the first two seasons, with three episodes each, and one Christmas special. The series was bought by Netflix in 2015, who produced the series from season three to season five. Besides the independent episodes, Netflix also produced an interacting movie under the series thematic, *Bandersnatch* (2018), which is very *Black Mirror* as it approaches the technological engagement of its audience who is able to make choices and change how the movie will develop. The series is composed of independent episodes, each one of them has a different cast, a different scenario, and, in a few of them, even a different reality, but they are all concerned with the representation of technology's effects on society. Regarding my objects of study, one episode is produced by Channel 4, while the other two are Netflix productions, but this fact does not interfere in the analysis. At the moment this thesis is being written, the year of 2020, the renewal of the series has not been officially confirmed and producers show little possibility of having a new season in a near future. Charlie Brooker, the creator of the series, has spoken that the world may not be in a good moment to face new episodes of the show<sup>1</sup>.

Regarding *Black Mirror*'s identity as a series, the connection with technology and the ways we use them, Brooker wrote about some new technological developments that he considers to be bizarre, such as a video game installed above urinals. In his description of those technologies, he invites his readers to reflect about humans' interaction with machines. He says, after enumerating some of those technologies: "read that back to yourself and ask if you live in a sane society"<sup>2</sup>. Listing these bizarre innovations as some of the motifs of the creation of *Black Mirror*, he also defines the series' tone as something that walks between delight and discomfort,

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<sup>1</sup> <https://gadgets.ndtv.com/entertainment/news/black-mirror-season-6-charlie-brooker-pandemic-coronavirus-break-dystopia-2224692>

According to Brooker, he did not give up working on *Black Mirror*, but the writing of new episodes is paused. Due to the Coronavirus pandemic the world faced throughout 2020, he thought *Black Mirror*'s provocative tone and distressful themes might not be what the audience needs this year. Besides, the series power of affecting its audience with the narratives approaching issues surrounding electronic devices, in ways that are sometimes very close to our reality, might also be a negative emotional trigger, as the pandemic straightened even more our relationship with technology because of quarantine, lockdown decrees, and social distancing practices. *Black Mirror*'s anguish and sometimes terror atmosphere might be even more increased taking into consideration these abnormal conditions imposed by the pandemic.

<sup>2</sup> Interview with Charlie Brooker on The Guardian:

<https://www.theguardian.com/technology/2011/dec/01/charlie-brooker-dark-side-gadget-addiction-black-mirror>

as technology is everywhere in our daily lives, playing different roles. When it comes to the series' format, Brooker talks about his inspiration in other series and famous productions of science fiction, the most important of them being *The Twilight Zone* (1959). Brooker's appreciation for the former series is, according to him, one of the main reasons why *Black Mirror* is composed in the form of an anthology, in which each episode the viewers face a different world, but still with the same signature that is, in this case, the plots based on the human-technology relationship issues. Although *Black Mirror* is composed by independent episodes, they are connected thematically through the shared concern in depicting technology's effect on society.

In regard of *Black Mirror*'s multiple perspectives on human-technology relationship, my main goal with this study is to investigate the consequences of this interaction with technology regarding aspects of memory in relation to surveillance and control. My corpus is formed by three episodes in which the characters' body are implanted with electronic prosthetic devices that modify the way their access to memory happens. The episodes are *The Entire History of You* (season 1, episode 3, 2011), *Arkangel* (season 4, episode 2, 2017), and *Crocodile* (season 4, episode 3, 2017). From this point on, I will briefly explore the series as a whole, pointing out to how *Black Mirror* approaches technology and our use of it. After that, I will explore the relationship of the episodes chosen for analysis with the concept of prosthetic memory. This term will be better explained further in this chapter as it is a central concept that connects the three episodes; thus, I will delve deeper into its definition later. Then, I will present the concept of posthumanism and the cyborg, which are essential to make possible the construction of the prosthetic memory, and to discuss the human-technology connections. At last, I will approach memory, surveillance, and control in the context of the fictional world of the three episodes.

*Black Mirror*'s opening sequence is very remarkable as it introduces each episode in the same manner. In this first moments, the series establishes a connection between technology and the mirrored surface of the screen, since the opening sequence momentarily turns our own televisions, or any other screen used to watch it, into the black mirror, as we stare at their darkened screen. The screen remains completely black for a few seconds, as if it is turned off, making it possible for us to see our reflection on it. Then, the black mirror of the screen starts to show a 'loading' symbol, accompanied with a disturbing and growing noise. This sound can be categorized as formed by electro-acoustic analog tunes, which is basically a sound wave

produced only by electric pulses. From a compositional point of view, this sound has a conical structure, as it offers a rise in rhythm, height, dynamics and exposure of elements<sup>3</sup> while the screen starts to glitch. The opening sound/noise, then, is a musical artifice of generating expectations for what comes later, and the idea of a conical structure suggests the raising of expectations about what the ‘glitching’ of the screen means and how will it end. Therefore, the growing of this sound also corroborates to the building of the suspense in *Black Mirror*’s opening title.

**Figure 1** - *Black Mirror* opening sequence, the broken screen.



Source: Netflix.

At the highest frequency of the sound wave, finally, the screen shatters as it is shown in the image above (Figure 1). The black mirror cracks and the ‘broken’ screen no longer allows the image to be seen without distortion, not only the image projected on the screen, the *Black Mirror* heading, but also the mirroring image of its audience on the black screen. The reflection of the black mirror becomes distorted, and, after that, the episode begins. The composition of the images and sounds in this introductory moment to each episode might infer the symbology of a disruption of this human-technology interaction due to the concerns the series raises. *Black*

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<sup>3</sup> The information needed for this analysis can be accessed in Arnold Schoenberg’s *Fundamentals of Musical Composition* (1967).



*Mirror* demonstrates with its opening sequence what it came for: it raises our expectations about what it is to come in each episode, whose stories question most of our current and growing relationship to technology with narratives that show the extreme of what it can do.

*Black Mirror* has been a successful series in attracting a wide audience since its debut in 2011. A demonstration of its success is that in Brazil there is an expression that went viral on the internet, as the series became famous, which goes like: *This is so Black Mirror*. Among the fans of *Black Mirror*, this expression is used as a descriptive tool whenever there is the need to express that something is innovative. To describe something that is considered to be mind-blowing, or even something that goes against the standard narratives that we are used to see in movies, series, or books. Or yet, if something is too disturbing to be watched, or too dystopian, some people might use the internet-famous expression to refer to such event. It is an interesting fact, however, that during the years of streaming of the series, I met some people that told me they were not able to go through all the episodes because *Black Mirror* makes them feel uncomfortable. Encouraged by this fact, I went on the internet to discover how the series (and specifically the episodes I deal with) is usually described. Psychological thriller, violent, dystopic, controversial, satire, are some of the words and expressions most related to the series in my web research<sup>4</sup>. However, I have also listened to and seen descriptions of *Black Mirror* as funny, lovely, innovative, and visionary (and I also have described the series with similar positive adjectives). I kept wondering, then, why are these groups of words so different and, perhaps, contradictory? The reason for such different responses to the series must be that *Black Mirror* proposition is to permeate a variety of themes related to technology, carrying different perspectives and purposes in each episode, in order to foster more possibilities of affecting its audience. That is, probably, one of the main reasons why *Black Mirror* is such a success. Besides, it is fascinating how the series manages the way each episode deals with the human-machine relationship within its own themes, providing a critical perspective about many aspects of our everyday life. This critical perspective is oftentimes frightening, because it is very tightly related to our daily lives in relation to our use of electronic devices. Thus, the episodes' criticism on technology may be too harsh on some viewers, but extremely necessary if one wants to reflect about how technology is constantly changing people's lives. This is closely connected to the black mirror metaphorical opening, as it leaves space for such themes brought by the

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<sup>4</sup> In this research, I took into consideration the keywords most used to describe the series on the *Black Mirror* page at IMDB <https://www.imdb.com/title/tt2085059/keywords>

symbology of the mirror and its power of not only to reflect, but also to distort or magnify reality. In this manner, the series *Black Mirror* approaches a variety of themes which are closely related to our current technologies and present time, as it also speculates about the future we are heading to.

Some of *Black Mirror* episodes are very surprising due to the ways they approach our reality and the issues of the present time. Thus, the themes exposed in some of the most well appraised episodes are not necessarily concerned with a cutting-edge technology, instead, the series usually addresses, with a representation of a technology similar to our own, themes that are very thought provoking on how humanity is moving towards the future and how some questions about our relationship with these technologies are being addressed. The plot of the series' pilot, *The National Anthem* (2011), is a good example to discuss this approach to the present time and our current technologies, as it reflects on how technology is also playing a part in politics, which is something that has become very common to us especially in the last few years. The episode narrates the story of the United Kingdom's Prime Minister, who is blackmailed after the Princess is kidnapped. The princess kidnapper demands that he should have sex with a pig, and transmit it on live television in order to have her released. The whole event stops the city, people gather in public places to watch as the Prime Minister, under pressure, goes live to accomplish what the unknown kidnapper had demanded. After the whole commotion around the shocking broadcasting, it was discovered that the Princess had been released before the deadline given by the kidnapper, and no one realized it. Later, the kidnapper is found dead by suicide, and revealed to be an artist whose intention with the whole blackmail plotting was to draw attention to people's obsession with the sensationalist media.

This first episode demonstrates the series' intention to discuss the use of commonly known technologies and how people are also affected by them, since the episode's main concern is not to develop on some fictional invention, because the ones shown are nothing more than a computer, which the kidnapper uses to communicate and to blackmail the Prime Minister, and television broadcasting. The focus of the episode lies on how people got engaged in such odd happening, being more concerned about the spectacle of following through the television whether the Prime Minister would end up having sex with a pig, than being worried with the kidnapped girl's life, or with the capture of the criminal. The fact that no one noticed that the Princess was released before the deadline given by the kidnapper serves as an alert to how people were immersed in the sensationalism created by media around the event. Also, the

episode approaches the idea of technology and mass media interfering in politics, which is a very common theme in our reality and, consequently, in *Black Mirror*'s narratives. *The Waldo Moment* (season 2, episode 3, 2013) is another example of this political concerned approach and of the proximity with present time. The episode is all about a computer-animated bear named Waldo, a comedian's character which is very satirical toward politicians. Amid public's discontentment about politics, Waldo ends up being voted for competing for elections.

Although *Black Mirror* is a science fiction series concerned with the use of technology, the issues approached by the series are not necessarily futuristic or provided with much technological developments. Thus, science fiction productions are known to be those that represent some of our worries and curiosity about what is new to society, be it about space travel or about products of science. It is a genre that is always changing, since its main concerns are also always in development and evolving with time, along with the changes society suffers (ALTMAN, 2003). In this sense, *Black Mirror* portrays the worries of a society that is constantly being shaped by the use of old and new technologies, and that is what makes the series very relevant to our time.

Among the themes developed by the science fiction genre, are the issues about technology and how its evolution is capable of changing society as we know it. Therefore, being a product of a society's worries and curiosities, science fiction has also developed much on the technologies related to time, and, in a certain way, with interrogating linear and non-linear conceptions of time. In fact, some of the well-known concerns of the genre has been to represent time issues, such as H.G. Wells' *The Time Machine* (1895) and other stories built around the idea of a time travel, for instance. In these manipulations of time, many science fiction productions tend to represent the future, or how Earth will be, so that they project time to a future state of the world. Some of classical science fiction movie productions used to project some moment in time, such as *2001: A Space Odyssey* (1968), or even *Blade Runner* (1982) placed in 2019, and its sequence *Blade Runner: 2049* (2017), clearly stating when they are in time. Others play with the past, placing its stories in a long time ago, in a galaxy far, far away, as *Star Wars* (1977) does. Different from those, *Black Mirror* episodes are not projected in time, most of them are not even placed in any specific time, but they seem very close to our reality because they utilize well-known symbols to approach different themes regarding technology. Just as a great part of the most recent productions on science fiction, *Black Mirror*

included, are no longer necessarily distancing from the world as we know, instead they are approaching elements from our daily reality in a different manner.

*Black Mirror* explores the science fiction side of the technology, but keeps the story in a close relation to our own interactions with technologies. It creates and represents technologies whose aim is to relate to the ones currently in use, in order to approach science fiction through concerned psychological and social perspectives. In many episodes the technology is much closer to our reality than we perceive it to be, such as the episode *Nosedive* (season 3, episode 1, 2016), in which people in this fictional society can rate their online and in-person interactions on a five-star scale. The rating system serves as a base to many social interactions, it establishes how good that person is to society, thus, according to their rate, people are socially accepted in a determinate sphere, and have a pre-established social economic status. Everything depends on how the person is qualified in this mobile application, which is pretty similar to the ones available today, such as Instagram and other similar social media. This episode is not very far from what we have now, since it is representing a smartphone application, with which people make connections and show off their life in pictures, which, most of the time, ends up encouraging the manipulation of self-image online to fit in a specific lifestyle, as the protagonist in *Nosedive* does in order to reach the social status of those who are rated better than she is. In fact, *Black Mirror's* third season (2016) gives place to some of the plots most easily relatable to the present. *Shut Up and Dance* (episode 3) and *Hated in the Nation* (episode 6) are also examples of this technological proximity with our current time. The latter being an explicitly criticism of Twitter and its hate culture, while the first approaches a plot of blackmail concerning the hacking of a pedophile's webcam.

*Black Mirror's* episodes encompass plots with very similar technology, if compared to the ones present in our daily lives today, but they also speculate about how these technical apparatuses would be developed and adapted to a future time. Such as a video-game that makes possible for one to have access to a much more credible virtual reality, one in which bodily sensations are felt inside the game, as shown in *Striking Vipers* (season 5, episode 1, 2019). Yet, there are some episodes that go beyond any known current technology. *San Junipero* (season 3, episode 4, 2016) and the mind-uploading system that allows people to have a virtual life after death is an example of a parcel of the episodes that speculate on more complex future technological inventions. As it is *Be Right Back* (season 1, episode 2, 2013), in this episode a widow starts interacting with her late husband in a computer program created to help people

with the grieving process, which recreates her husband's personality based on all the data about him available on the internet, such as his messages, and his voice and video recorded files. The ultimate product sold by the program application is an alive synthetic replica of the man's body, with his voice and bodily movements. Despite the fact that these two episodes are dealing with a more complex idea of technology, they are also using it to approach very common themes, which are, in those cases, death. *Black Mirror* uses the existing technologies and their futuristic projections to approach some of the most humane issues, as death, love, crime, fear, and politics, among others. Considering that the modern world is imbricated with technology, productions like *Black Mirror* may be essential to foster our own understanding of this new relationship with technology. I consider this a new relationship because it is no longer just the use of some technology, but its incorporation by the users' body and their dependence on it.

About a year ago I was scrolling down on my smartphone when I saw some entertainment article that asked me: "do you have a crooked little finger due to the use of cell phones?"<sup>5</sup> [My translation]. That apparent harmless and silly article intrigued me with the pictures it brought to demonstrate their crooked fingers theory, and, instantly, I recall putting my two little fingers side by side for comparison. I was not even surprised to discover that the little finger on my right hand, the one I use to support my current smartphone of 168g of weight, was considerably crooked. That discovery made me a little bit euphoric at first, but then I started to consider all the implications of it and the meaning that this small anatomic alteration carries. By the day I write this, I have lived fifteen of my twenty-five years of age in possession of a cell phone (or smartphone, if you prefer, I had them even before they were considered to be smart). This says a lot about my crooked finger, and my crooked finger (and all the crooked fingers around the internet) might be able to say a lot about the way we are bodily incorporating machines.

Concerned with these technological issues, *Black Mirror* is notorious for being a series that depicts technology playing a significant role in the characters' lives and social relations. Whether in an episode about social media, or in an episode depicting a futuristic invention, the series usually approaches the consequences of the extensive use of technology. Therefore, among these consequences, in many episodes the themes of surveillance and control are also present, even though they are approached from different perspectives. In the three episodes with

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<sup>5</sup> Entertainment website: <https://catracalivre.com.br/entretenimento/internet-quer-saber-voce-tem-mindinho-torto-de-apoiar-celular/>

which this thesis is concerned, the prosthetic memory is closely related to surveillance as the memory becomes an instrument for vigilance and for exertion of control. So, from now on, I address three major discussion that contribute for the fictional representation of society in the chosen episodes of *Black Mirror*: the cyborg (posthumanism), its prosthetic memory, and acts of surveillance and control.

Ever since the great industrial revolutions, which were responsible for bringing the machines to citizens daily life, we have been each time more dependent on them to perform some activities. Nowadays, not only the production means were changed by machines, but also great developments were made in the sciences, in medicine, and especially in individuals' lives generally, with the modern means of communication and the rise of a new kind of social life, a technologically mediated one. When reflecting on the changes that occurred in this period of time (a brief one, if we consider how much the way of life has been modified), it is noticeable that, with technology, society started to shape itself in a very fast pace, in a rhythm necessary to follow the newest innovation. It was not a surprise to see technology taking those places that once were humans' and reconfiguring the way things are done and understood. Regarding these changes, some *Black Mirror* episodes deal with the modification of the natural body with technology, in an attempt to raise discussions concerning the way we are dependent on our machines and also to promote reflections about the consequences of these possible modifications. Therefore, among the many possibilities within the science fiction genre to approach these issues, there is the concept of technology being incorporated to the human body, and the cyborg figure is the symbol of this encounter.

The article "*Cyborgs and Space*" (1960) is known to be where Manfred E. Clynes and Nathan S. Kline coined the word cyborg, as resulting from the combination of words in the expression 'cybernetic organism'. Focused on applied sciences, and placed in the period of the spatial advances of the mid-20<sup>th</sup> century, their study was concerned with a project of possible adaptations that would be needed to transform the astronauts in a being who could make long duration space travel possible. According to Clynes and Kline, the term cyborg "incorporates exogenous components extending the self-regulatory control function of the organism in order to *adapt it to new environments* [my emphasis]" (CLYNES and KLINE, p. 31). Regardless of the space travel and other possibilities that stayed behind in the turn of the millennium, cyborgs of the real world as well as the fictional world's cyborgs still seek to be adapting to some system. Since the cyborg is in constant process of enhancing and of adaptation of its own self, the

adaptation to other new and different environments is inevitable. The current environment, I would say, is a post technological revolution in which machines, micro and nanotechnology, along with digital information and data collection require some adaptation from those who coexist with them.

*The Cyborg Manifesto* (HARAWAY, 2000) is another groundbreaking work on the writing about cyborgs. Donna Haraway deals with the cyborg as a metaphor to a new subjectivity which encompasses difference instead of creating sameness. One of the goals of Haraway's article is to promote a discussion about the breaking of three boundaries that is caused by the cyborg figure<sup>6</sup>. In this sense, the cyborg is the symbol for the deconstruction of the boundary between human and animal; between human-animal (organism) and machines; and the boundary between the physical and the non-physical. About the first, Haraway mentions the way the animal become even more treated as close related to the human species and each time more involved in politics, such as the animals' rights. The second boundary is related to the integration of organisms, and consequently humans, with technology, the breaking of the dualism between organic and inorganic, and the understanding of their coexistence and interface. And finally, the blurring of the physical and the non-physical, in which Haraway mentions the 'invisibility' of the micro and nano-machines and how they challenge the idea of materiality and visibility. With a better understanding of these blurring of boundaries, Haraway then affirms that the cyborg being seeks not the unity for it is a non-unitary being. The new being theorized by Haraway is a fragmented being, and, then, it is a myth for resistance. The cyborg being is able to connect due to its fractured identities, it is more inclined to make kin

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<sup>6</sup> Although Donna Haraway's manifesto brings the cyborg as a central issue, and is considered a milestone for the study of posthumanism, she is discussing it as a symbol for all the different relationships between humans and with other species, or with the non-human. Haraway's cyborg is broader than the cybernetic organism that became the symbol of human-machine hybridization. That is why she later detached herself from the term posthuman, as some strains of the posthumanism begin to be strongly connected and used as a spreading of utopian ideas of using technology to improve humans' capability, instead of questioning humans' sense of exclusivity and of promoting interspecies coexistence and relations with our "significant otherness", in Haraway's term. Then, she later writes *The Companion Species Manifesto: Dogs, People, and Significant Otherness* (2003), as well as *When Species Meet* (2008), approaching human relationships with animals, with the non-human, to expand her ideas that begun with the breaking of the boundary between human and animal in the *Cyborg Manifesto*. All these breaking of boundaries that Haraway writes about are essential for the understanding of her heterogeneous cyborg, a being whose essence is based on her concepts of "coalition, affinity and political kinship" (HARAWAY, 2000, p. 296) to live in a new social order with new systems of domination. These breaking aspects of Haraway's text toward any trace of hierarchy are essential to look at the cyborg as a being capable of rethinking gender, sexuality, race, the non-human, and also techno science issues. As Haraway describes it: a myth for resistance. Taking all that in consideration, the ramifications of her cyborg's essence are, in sum, the reason why she rejects the term posthumanism, due to her view of the term's limitation on covering such complex relationships, and of its often-generalizing understanding of the cyborg as merely a human-machine assemblage.

and promote affinity with other beings and with machines, than to seek a wholeness or a model of human being.

Within this context, one of the most fascinating aspects of *Black Mirror* is that the series constantly aims at provoking the audience's reflective thinking about the technologies that we use in our current time, and how these technologies are also related to some level of surveillance and control. Issues concerning surveillance and control appear frequently on the series agenda, and they can be perceived even in episodes that are not focused on this discussion. The episode *Be Right Back*, previously mentioned, is a good example of this approach, since the artificial revival of the dead only becomes possible due to the digital system of monitoring people and to the collection of their personal data gathered and stored through one's exposure to the internet. In this regard, *Black Mirror* approaches the institutionalized surveillance, as well as the relationships of surveillance and control that emerge among the individuals due to this whole system of monitoring. Surveillance, and consequently control, appears in the three episodes in many levels, from government and institutions to the people, within people's relationships, and also as a personal dilemma.

Regarding memory, anticipating the analyzed episodes' main theme, our society may not have the capability of an artificial memory construction and access, but, besides the photographs and videos, our memories and actions are, somehow, recorded in different ways and in different places. Technology, and especially internet, made us put our memories available to the others. We are constantly tracked by what we access on internet, what we post online and whom we relate with, digitally. Within the digital world we leave a very clear record of what are our interests, who we connect to, where we've been, what we want to buy, and also who we are, even if superficially. In the episodes' context of human enhancement with technology, memory becomes the focus of alteration in the body of the cyborg characters. Thus, it is on the enhancement of the access to memory by prosthetics that the once natural memory is constructed into prosthetic memory. A memory that is mediated with the aid of technology. A more substantial approach to the significance of prosthetic memory can be found in the memory studies developed by Alison Landsberg. In her seminal book, *Prosthetic Memory* (2004), Landsberg's concept walks between the real and the fictional, as she devotes some attention to how the past affects the way memory is constructed into a prosthetic memory, using as examples the real life and also science fiction productions.



The term prosthetic memory is defined as a memory that is built upon events that are not necessarily one's own, especially those related to historical narratives, in real life. In Landsberg's words, the prosthetic memory may be the one that "emerges at the interface between a person and a historical narrative about the past, at an experiential site such as a movie theater or museum" (LANDSBERG, 2004, p. 2). It is, therefore, a memory that is mediated through some other element, and becomes part of a person's life experience. Memory is transformed by "mass cultural technologies of reproduction" (LANDSBERG, 2004, p. 3), and Landsberg gives an account of these technologies, from theatres and museums to the virtual knowledge of a given event. Within her study, the meaning of this term has been extended to refer to the realm of science fiction, in which not only the body parts can be replaced by prosthetics, but also can memory. Landsberg approaches the literal state of the prosthetic as something external to the body, a memory that does not follow the natural process of remembrance. According to her, the reason they are named prosthetic are the following: First, because they are mediated, they are not natural or organic, they pass through the mediation of some technology of reproduction. Second, because Landsberg describes them as artificial limbs, the memory is worn by the body who access it. Third, because the term prosthetic "signals their interchangeability and exchangeability" (LANDSBERG, 2004, p. 20) which makes possible to relate the prosthetic memory to commodification, for instance, since it is produced by external influences. Finally, the fourth reason for this nomenclature is due to the utility of the memory, in the same manner that a prosthetic limb is useful to a disabled body. Regarding the fictional narratives and the prosthetic memory, Landsberg asserts that, "in some important ways, science fiction cannot simply be dismissed as escapism; rather, it reveals the very real collective fantasies and anxieties of a culture at a specific historical moment." (LANDSBERG, 2004, p. 28). Still, while analyzing the memory-based narratives in the movies *Blade Runner* (1982) and *Total Recall* (1990), she argues that many science fiction narratives, similar to those in the movies selected, are "literalizing prosthetic memory" (LANDSBERG, 2004, p. 32), being good examples of how the twentieth and twenty-first centuries mass cultural technologies are capable of creating new relationships to the past.

It is noticeable that within *Black Mirror* and its dystopian narratives, posthumanism and the cyborg figure are essential elements to pursue a critical perspective on the show, since the human-machine interaction is the issue on focus. Therefore, there is a need to be explicit about exactly what is meant here by the posthuman. For my purpose within this study, it is

relevant to focus on the human-technology relationship in order to understand *Black Mirror*'s cyborg characters, due to their interface with the machines. Thus, although the focus I am giving to the posthuman is in the human-machine relationship, I must highlight that the term does not refer specifically to the notion of interaction between human body and non-organic elements. Instead, posthumanism is broader and greater than this definition, and it extends to the understanding of the diverseness within the human species and also its relationships with the multiple "others", rejecting the idea of humans being the center of existence and fostering our equal coexistence with the non-human. By non-human, it can be understood as the other species, the organic and inorganic elements on Earth, or even our technologies, where the human-machine relationship can be spotted. Posthumanism, as Pramod Nayar defines, "calls for a more inclusive definition of life, and a greater moral-ethical response, and responsibility, to non-human life forms in the age of species blurring and species mixing" (NAYAR, 2014, p. 19).

Departing from the idea that the notion of human needs to be restructured, resignified and understood, posthumanism starts from the inside out, primarily looking at the relationship between humans themselves. In this sense posthumanism can broadly be defined as a philosophical perspective that aims to deconstruct the idea of 'men' that was established by the Enlightenment, with the idea of unity and homogenization of the human race. As Rosi Braidotti points out, "we are all humans, but some of us are just more mortal than others" (BRAIDOTTI, 2013, p. 15), these others who have been defined by issues of power and exclusion. Moving a step forward, posthumanism, then, not only looks at the differences among humans, but also at the relationships between humans and non-humans. Within this acknowledgement that there is no separation of humans as subjects and non-humans as objects, the former idea of 'men' is deconstructed, as well as the idea that the 'human' is above other forms of organisms in value. Braidotti describes very well these origins of posthumanism in her book *The Posthuman* (2013). She starts it by discussing the importance of the symbol of the Vitruvian Man for Humanism. According to her, the Humanism that comes from Antiquity and European Renaissance ideals supports the idea of the "capacity of humans to pursue their individual and collective perfectibility" (BRAIDOTTI, 2013, p. 13). Then, it is exactly with the attempt to deconstruct the unitary idea of human that arrangements such as the cyborg become a possible being. It is with this offspring of posthumanism with which I am concerned when analyzing the new perspectives that rise from the different relationships humans are developing. This intersection

of differences captures a number of important features of the modern life, which is hugely connected to technology. My focus, then, is on the symbiotic relationship between humans and machines, materialized in the prosthetic memory.

Cary Wolfe (2010), in the same vein of thought of Braidotti and Haraway, proposes a new conceptualization of posthumanism. For Wolfe, the comprehension of the posthuman involves an understanding of human as “[...] fundamentally a prosthetic creature that has coevolved with various forms of technicity and materiality, forms that are radically ‘not-human’ and yet have nevertheless made the human what it is” (WOLFE, 2010, p. xxv). In Wolfe’s vision of the posthuman, he engages in a perspective of the humans as *human animals*, a posthumanism that increases the awareness of human equality among the non-human forms of life, instead of superiority. In this sense, Wolf proposes a posthuman condition which “means not the triumphal surpassing or unmasking of something but an increase in the vigilance, responsibility, and humility that accompany living in a world so newly, and differently, inhabited” (WOLFE, 2010, p. 47).

The posthuman condition, then, does not refer to the end of the human species as we know, but to its evolutionary heir (HAYLES, 1995). It reflects on the differences that were brought to light when the ‘human’ stopped being taken as unitary in its essence and superior in hierarchy, in comparison to other life forms and the new subjectivity that comes with the cyborg. It is a matter of importance to look critically at the various possibilities of being that emerge along with the revision of humanist views and its limitations. As Pramod Nayar describes in his book *Posthumanism* (2014):

Critical posthumanism, as we shall come to call this philosophical and political theme in literature, popular culture and theory, is the radical decentering of the traditional sovereign, coherent and autonomous human in order to demonstrate how the human is always already evolving with, constituted by and constitutive of multiple forms of life and machines. (NAYAR, 2014, p. 11)

What is remarkable about posthumanism is that it encompasses new possible ways out of the former model of what it means to be human. It is concerned in understanding how the changes regarding humans are enacted in the world. One of the relationships that is resignified by the posthuman is the one between humans and machines, as I previously spotted. Within the objects of analysis of this thesis, it is crucial to understand how this human-machine hybridization gives place to a new configuration of life. Without this posthumanist idea of an evolutionary relationship with technology, the concepts of prosthetic memory and the

resignification of surveillance and control methods would not be as relevant as they are here in this work. Moreover, the attempt to understand the new configurations of modified humans, the so-called cyborgs, may be a key aspect in the comprehension of a modern society. In this sense, in the fictional society of the *Black Mirror* episodes, posthumanism appears each time the show straightens the relationship between humans and technology, opening space to foster a reflective thinking about a new kind of memory and new modes of surveillance and control that emerge with this hybridity. Besides that, posthumanism, for Rosi Braidotti, is promoting “alternative ways of conceptualizing the human subject” (BRAIDOTTI, 2013, p. 37), and she discusses the development of this theoretical concept, while arguing for a posthuman subject that manages to live between internal and external differences and acknowledge the multiplicity of others. When in contact with different species and machines, the posthuman subject is in a constant construction of itself, at the same time that is in a “flow of relations with multiple others” (BRAIDOTTI, 2013, p. 50).

If on the Humanism side there was the Vitruvian Man as a symbol for recognition, as a model and a measure of human being at its best, with posthumanism there is the cyborg. The cyborg does not follow any pattern; therefore, it seeks no fitting within the golden ratio. The cyborg is, though, all but what is homogenized and forced into an idea of unity. The cyborg figure is a being of the posthuman context, it is no longer only human, because it is enhanced with cybernetics, as the origin of the word points out. It is a living of a new and hybrid reality, as well as a product of a symbiotic relationship. Suffice to say that the cyborg is not only a product of imagination, borrowing the words from Donna Haraway (2000). Cyborgs also exist in real life, they may be bodies that need a pacemaker to control their heart beats, or they may be us, twenty-first century beings who cannot live without our smartphones’ presence. Perhaps this is one of the reasons why we also create them, the cyborgs, they are in the movies we watch, in the books we read, and in many people’s imagination. We use them fictionally to speculate where we may get with all this technological developments of the last decades. We not only imagine the cyborgs, but we also attempt to learn how to deal with the deeper changes their existence cause in every aspect of the social and personal lives. To understand the balance, to see the body and machine interaction as a symbiotic relationship is the posthuman challenge.

Nancy Katherine Hayles is more emphatic in exploring the blurring of boundaries between organisms and machines. She stresses the importance of the understanding, through a posthuman perspective, of how the interaction of body and machine happens as a

nonhierarchical one. To Hayles (2005), the mere contact with technology is a changing element to one's life, as she states that:

Encountering intelligent machines from this perspective enables me to see that they are neither objects to dominate nor subjects threatening to dominate me. Rather, they are embodied entities instantiating processes that interact with the processes that I instantiate as an embodied human subject. The experience of interacting with them changes me incrementally, so the person who emerges from the encounter is not exactly the same person who began it (HAYLES, 2005, p. 243).

For her, the human body must not be taken as the original and most important part in this encounter. Instead, she promotes an understanding that, in the symbiotic relationship, both parts are equivalently meaningful to the construction of the final being. On *How We Became Posthuman* (1999), Hayles have already promoted the idea that the result from the interaction of body and machine must be seen as a mutual relationship, one in which all the elements involved are transformed, not only the human. The new being, the cyborg, which results from these interactions are not only physically, but also essentially different, therefore, it needs a proper understanding of its subjectivity and of the changes it causes on society.

These are the two major definitions I aim to describe in order to understand the context in which the characters of the *Black Mirror's* episodes discussed are inserted. Most of the characters I analyze in the next chapters are cyborgs. The cyborgs, as I shall now define in relation to my corpus, are all those who coexist with a prosthetic device which is able to alter the way they experience memory and, consequently, their whole life's experiences. The posthuman context of these episodes requires a different perspective on the way memory, surveillance and control are represented. One of the aspects of this new configuration is the construction of the prosthetic memory, the understanding of how the organic memory is transformed and modified by the cyborgs' hybrid bodies. Thus, besides my focus on the posthuman being on the human-machine hybridization, the cyborg condition on the episodes also implies the need for discussion on gender, power relations, discrimination and the diverseness of the characters. The cyborg, even though is put as a figure of resistance against an oppressive model of what is to be human, in the context of the prosthetic memory is still vulnerable to the power relations that arise from the regulations that a surveilling and controlling society poses. Simultaneously with the change brought by the technological enhancements in each episode, there is the need to rethink how acts of surveillance and control emerge due to the materialization and the exposition of memories.

Regarding the theme of surveillance, I depart from Michel Foucault's *Discipline and Punish: The Birth of Prison* (1977), focusing primarily on the description of the panoptic model and the disciplinary society. Having also prescribed the 'death of man'<sup>7</sup>, Foucault dedicates most of his genealogical work to the purpose of investigating the social contexts in which the human is formed, even if Foucault, being an anti-humanist, also put into doubt the very idea of a human nature. A key aspect of Foucault's work on the genealogy of the prison is the disciplinary model that arises with the implementation of many rules to the prisoners' bodies, controlling their space and time with discipline. The utopian model for discipline is the panopticon. The concept, derived from the Greek words *pan* and *optikós*, is self-defined as that which is permitted to see all.

The panopticon, in Foucault's considerations, is not merely an architectural model<sup>8</sup>, it carries an ideology. It is a mechanism of discipline, a model that guarantees that the disciplinary power can work without being exposed or promoting a spectacle. It is formed of many small disciplinary details that form a complex network of power. In his studies, Foucault also questions why prisons and other institutions are so much similar to each other in their hierarchical organization. He, then, demonstrates that the panoptic model can be spotted in many other institutions that accompany people throughout their life, such as the school, the hospital, and the work place. Having our contemporary society in mind, the panopticon cannot only be read as the prison model, or an institution's organization, but it also serves as an understanding of any pan-optic system, any system in which total surveillance reigns. As Foucault states:

The Panopticon is a privileged place for experiments on men, and for analyzing with complete certainty the transformations that may be obtained from them [...] on the other hand, must be understood as a generalizable model of functioning; a way of defining power relations in terms of the everyday life of men.  
(FOUCAULT, 1977, p. 204 - 205)

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<sup>7</sup> In *The Order of Things: An Archaeology of the Human Sciences* (1971).

<sup>8</sup> It is important to notice that the panoptic model was originated with the work of philosopher Jeremy Bentham (1748-1832). In Bentham's "Panopticon Letters" (all Bentham's work regarding the prison model is published in *The Panopticon Writings*, 1995), he projects what would be the utopian architectural model for prisons. Bentham, then, is the one to receive recognition for describing the operational system of the circular structure guarded by the high tower. In *Discipline and Punish* (1977), Foucault does focus on the genealogy of the prison model, as he provides the reader with a historiographic study of the changes in punishment up to what he calls 'the birth of prison'. Besides, Foucault uses the term and the idea of the panopticon to analyze it critically as an element of his disciplinary society, giving Bentham's model a broader applicability and social understanding, extending its implications to other institutions such as the schools, the hospitals, and the military organization.

In one of his lectures in the *College de France*, Foucault states that the panopticon can be seen as “a general social form that extends far beyond the prison” (FOUCAULT, 2015, p. 294). In a modern society, characterized by technological improvements, a parallel can be drawn between the panoptic model and many tools used for surveillance, such as cameras, drones, mobile location transmitters, tracking devices, internet algorithm, and many other elements that can monitor the user’s daily habits and actions. The prosthetics and the changes in memory they promote, with the construction of the prosthetic memory, may serve as examples of the new modes of surveillance that also resemble the panoptic model. If the natural memory is the ‘place’ in which everything we lived is kept, the prosthetic memory with the process of exposition of memory in the form of images to be accessed is the system in which everything becomes visible.

Complementary to Foucault’s disciplinary society is Gilles Deleuze’s society of control. In the short essay *Postscript on the Societies of Control* (1992), Deleuze talks about the movement from the disciplinary society, as Foucault have established, to the society of control. According to Deleuze, the changes the world has gone through, especially in the period post-World War II, required a new way of understanding how society was being shaped. Serving as a continuity for Foucault’s work, Deleuze’s essay describe how the changes in focus from the disciplinary to the control makes possible for the control to be ‘outside’ and not only inside the institutions as Foucault had discussed, mainly in relation to the utopian model of seclusion, the panopticon. Regarding this control on the outside, explored by Deleuze, the institution gives place to the company. Deleuze establishes the crisis in the “environments of enclosure” (DELEUZE, 1992, p. 1), in the institutions, as the main reason for leading society to move from discipline to control, because of the “progressive and dispersed installation of a new system of domination” (DELEUZE, 1992, p. 7). In that movement other kinds of containment means appear, and control is shown to be a variable in the different forms and molds of confinement. Also, according to Deleuze, every system begins to resemble the emerging model of the company. Thus, when the company substitutes the factory, the society enters in a state of perpetual metastability, in which the confinement modes are always changing and being reconfigured. If, on one hand, the factory was an institution that saw the individual inside the mass of workers with the one purpose of production; on the other, the company establishes endless forms of creating competitiveness between the groups of individuals. The company uses of schemas of modulation of each salary for merit, prizes, internal competition,

rivalry, always feeding the system of perpetual metastability. In the society of control, the workers become numbers, cipher, and their value oscillates in a similar way as the modulations of money oscillate in the market.

In the disciplinary societies one was always starting again (from school to the barracks, from the barracks to the factory), while in the societies of control one is never finished with anything - the corporation, the educational system, the armed services being metastable states coexisting in one and the same modulation, like a universal system of deformation. (DELEUZE, 1992, p. 5)

The post-World War II society and the technologies it brought are also different from Foucault's disciplinary society, in which cutting edge information technology and the internet were still at their early stages. The machinery in the society of control deals with much more complex powers, such as the data collection on the computer machines. The focus of the companies is in the product and not anymore on the production. Selling becomes more important than producing, and marketing took place as a controlling agent. In sum, to Deleuze, this new model represents a continuous and limitless control over society. The surveillance from the disciplinary society is still present playing its role, but now it requires the understanding that the system produces not only discipline, but also control. Besides, it is not present only in the institutions, but has migrated to their outside and established itself in most, if not every, parts of society. Given the comprehension of the range of possibilities in which the society of control is established, my ultimate hypothesis is that the prosthetic memory works as a form of exerting a new method of surveillance and control in the episodes' posthuman scenario. The image of the prosthetic memory becomes a substitute for surveillance and control, and the posthuman society becomes another form of the panoptic model.

All things considered, given the construction of the prosthetic memory in relation to surveillance and control, it is also interesting to have a broad comprehension of how the natural memory is understood. In the scope of memory studies, Henri Bergson is considered to have written one of the most influential works with his book *Matter and Memory* (1988), first published in 1896. In the book's introduction, Bergson asserts that one of his purposes with the study he conducted was "to overcome the theoretical difficulties which have always beset dualism" (BERGSON, 1988, p. 9). Bergson's whole study is dedicated, essentially, to understand the relationship between mind and body, a much-known symbol of dualism. Within this relationship, though, memory plays an important role, as Bergson himself explains that memory "is just the intersection of mind and matter" (BERGSON, 1988, p. 13). But, before



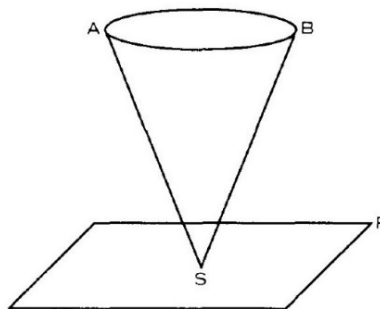
going deeper in his analysis of memory, past, and present, Bergson asks his readers to consider it as image, as explored in the paragraph below:

Here I am in the presence of images, in the vaguest sense of the word, images perceived when my senses are opened to them, unperceived when they are closed. All these images act and react upon one another in all their elementary parts according to constant laws which I call laws of nature, and, as a perfect knowledge of these laws would probably allow us to calculate and to foresee what will happen in each of these images, the future of the images must be contained in their present and will add to them nothing new. (BERGSON, 1988, p. 17)

By supporting the idea that people are able to absorb events in the form of images, therefore, in Bergson's views, any derivative of those experiences would take the form of images as well, such as memory and its materiality. The matter, in this sense, is precisely the very aggregate of images and the representation of those images.

In relation to the past, Bergson argues that there are two different types of memory: the habit memory, which is constructed through the repetition of certain actions, a memory that rises from the acquisition of some bodily performances; and the pure (or virtual) memory, classified by an unconscious remembrance of past events. If the habit memory is related to the body, then the pure memory is related to the mind and its processes of recalling images which are unconsciously stored. In order to understand how the connection to the past happens in this duo mind and matter, Bergson approaches the issue of memory through the concept of duration. For him, memory is, necessarily, something that has a certain duration in people's bodies, and something that, within its duration, is capable to touch the plan of present. Bergson demonstrates very didactically this encounter with what he calls the cone of memory, a model to represent how the access to the past is done. Explained with geometrical figures (the cone ASB and the plane P, represented on the figure below), he states that the relationship of memory (or past), the cone, with the present time, the plan, happens when the plan is touched by the cone's apex.

**Figure 2 - Bergson's cone of memory.**



Source: Figure taken from *Matter and Memory* (1988), page 152.

The cone itself would be formed by all the past of a living being, and when the apex of the cone touches the plan of the present, in the duration of this event, past touches present and that memory is brought to light. The mobility of the pure memories into the plane of the present is the action that turns them into images, and also what is capable of modifying that memory, because it never goes back to the cone as the same it was before. For Bergson, everything is image, and our experiences are based on the images and their endless mobility in our processes of remembrance.

Relating this knowledge with *Black Mirror's* episodes, Bergson's study is relevant his for the reason that it provides a way of understanding how our natural memory works, which is indispensable when considering a different way of accessing memory, such as the prosthetic memory in the three episodes under analysis. What I take from Bergson's is the idea that one natural memory when is remembered, it is resignified and never goes back to the mind as the same and exact memory of a specific event. So, as further from the present is that memory, more forgotten and less detailed it is going to be. Therefore, the understanding of the way the natural memory works is essential to understand the prosthetic memory, since it transforms the way ones relate to memory, from the way thing are remembered to how trustworthy that memory can be. The parallel between the Bergsonian memory studies and the prosthetic memory can be better spotted, and it will be better approached further, with the episode *The Entire History of You*. This episodes prosthetic memory contrasts a natural memory with a memory backup, which implies the memories cannot be truly forgotten, and also with the publicity of a memory transformed in image to be watched.

Departing from Bergson's study exposed in *Matter and Memory*, Marcel Proust terminologically diverges from his idea of 'pure memory', as stated by Walter Benjamin, when the last affirms that "to him [Proust], the *mémoire pure* of Bergson's theory becomes a *mémoire involontaire*. Proust immediately confronts this involuntary memory with a voluntary memory, one that is in the service of the intellect" (BENJAMIN, 2007, p. 158). It is noticeable by reading Benjamin's considerations about *Matter and Memory* (BENJAMIN, 2007, p. 157), that his main point of divergence with Bergson is resulted from the latter's rejection of "any historical determination of memory" (p. 157). Benjamin also highlights how Proust criticizes Bergson for dividing action from contemplation regarding the treatment of memory, in this sense, Bergson's two types of memory are related to action (the habit memory) and to contemplation (the pure or virtual memory). Bergson defends a perpetual movement between these two extremes of

memory, a balance between the virtuality of the memory and action of the body. Proust, on the other hand, rejects the tone of virtuality adopted by Bergson, and also the idea of the memory being in a movement between action and contemplation, even though it was from Bergson's notions on pure memory that Proust delineated his own study.

Then, it is on the essay *On the Image of Proust* that Benjamin exposes the convergence of his thought with Proust's considerations about memory, which would be the departure point of Benjamin's own studies on the issues of the past. In a very detailed study of Proust's work, Benjamin then defines the two types of memory with which they confront Bergson's pure and habit memory. Those are the following: the involuntary memory, that would be the one which really opens the windows to the past access, it would be best described as the memory that comes involuntarily (as the name already suggests) whenever there is a stimulus from objects, smell, music, and so on. While the voluntary memory is the memory connected to reason, therefore is that which brings to light specific and isolated parts of the past, it is a memory forced to be recalled, metaphorically speaking. Regarding the voluntary memory, Benjamin demonstrates to be concerned with its veracity, since he questions whether the voluntary act of remembering is closer to recollection or to forgetting, due to the willing of one to remember a specific event, that is why he states that "with our purposeful activity and, even more, our purposive remembering each day unravels the web and the ornaments of forgetting" (BENJAMIN, 2007, p. 202). In sum, Benjamin presents through the study of Proust, two types of memory that overlap Bergson's former two. Bergson's habit memory is disregarded in this new arrangement, and his pure memory is developed into the involuntary and stimulated memory, which is complemented by the idea of the voluntary and rational memory. Thus, the notion of image is also deeply connected to Benjamin's and Proust's memories, rising from the involuntary as well as from the voluntary memory, as Benjamin states:

To be sure, most memories that we search for come to us as visual images. Even the free-floating forms of the *mémoire involontaire* are still in large part isolated, though enigmatically present, visual images. (BENJAMIN, 2007, p. 214)

The work of Benjamin not only is complementary to Bergson's, but also to the understanding of how the prosthetic memory in the chosen episodes of *Black Mirror* is constructed. The concepts of voluntary and involuntary memory are also relevant to understand aspects of the access of the prosthetic memory, its relations to the others and the accessibility and publicity of the memories. A parallel can be made between the literal meanings of voluntary and involuntary memory and the relationships of power that makes one's memory being

mandatorily accessed by others, as in *Crocodile*, or a choosing of a specific memory to be re-watched in *The Entire History of You*, or even the situation of *Arkangel* in which a child is involuntarily submitted to the mother's control over her prosthetic memory. Each one of these authors, within their differences, share the common ground of dedicating their studies to the understanding of how people connect with the past, how the relation between memory and present is made. Being a new form of access to memory, the prosthetic memory also requires an understanding of how it establishes a relation to the past, since the prosthetic memory seems to be much more connected to the present, due to their immediate access and recorded reproducibility. The playing with the voluntary and the involuntary memory are also essential to speculate on this possibility of choosing what to see. These studies are important to make a contrast between the forgetfulness of the natural memory and how technology enters as something that aims at reducing this characteristic that is considered to be flawed on human beings. The memory, an important part in one's own identity and emotional life, is constantly forced to be maintained as vivid as possible, that is why we recur to photographs and videos to keep an essential memory safely stored from forgetfulness.

The studies presented thus far provide evidence that much of what was developed by the authors' mentioned in this section was based on the understanding of memory as some image or visual experience that is recollected. So is the basic functionality of the prosthetic memory and the transformation of the memory into recorded images. The knowledge of how the natural memory is processed is essential to explore the prosthetic memory and its panoptic aspects. This comparison between the prosthetic memory and the natural memory is approached in some moments in the different episodes, therefore, in order to grasp how the cyborg characters interact with their prosthetic memory, it is needed to look at how humans connect with their natural memory in reality. Therefore, the definition of Bergson's cone of memory, and Benjamin's voluntary and involuntary memory will be present in the forthcoming analysis chapters because these concepts are crucial to analyze the influence of prosthetic memory access in each episode context, as the characters' relationship with memory and their willingness to use the prosthetic memory are also issues to be discussed.

Having established the overall context of the thesis, the subsequent chapters encompass the critical and theoretical approaches to be used as tools for analysis of the episodes. I dedicate the second chapter, entitled *Surveillance and Control in a Posthuman World*, to unfold the main concepts and points of convergence among my objects of study,

which were briefly delineated in this introduction, with the panoptic model. Besides that, I also focus on the establishment of the prosthetic memory as image and the posthuman panopticon created with the prosthetic memory. Thus, I describe the relationship between the three prosthetics presented in the episodes — the Grain, the Arkangel system, and the Recaller — and how each one of them converge similarly regarding the theme of surveillance and control, as I write about the correlations between the prosthetic memory and Foucault's and Deleuze's notion of surveillance and control. Subsequently, the third chapter is dedicated to the analysis of the episodes. There, I determine how each episode can be read in relation to the panopticon, and how each prosthetic is being used as a tool for surveillance and control.

## 2 SURVEILLANCE AND CONTROL IN A POSTHUMAN WORLD

Surveillance and control have acquired different meanings as the world developed to a more automated and digitalized space. In this posthuman scenario, in which technology is imbricated with personal and social lives, some practices may adapt and start to have a different meaning in order to accompany the world's changes. Surveillance acts are known to have been sophisticated and better disseminated with the advance of technological apparatuses. Taking, for instance, the change brought by the cameras, a few decades ago, and now by a variety of elements brought by digital advances, perhaps the most prominent is represented by the internet algorithms and their discreet espionage. Even so, despite the developments, images of surveillance, such as the cameras, are still a crucial part of the surveillance mechanisms. These changes are much described by Pramod Nayar's, in his book *Citizenship and Identity in the Age of Surveillance* (2015). Nayar discusses the transformation of surveillance and describes it in this new age as "made up of several components: the collection of data, representing this data in particular ways, interpreting those data and producing social hierarchies (NAYAR, 2015, p. 28)." In this new world order, guided by the newest and smallest technological inventions, people's lives are constantly watched, or, if not literally watched, they are somehow digitally monitored, and the data about people are producing, and maintaining, social hierarchies as Nayar pointed out.

*Black Mirror's* effort with the series' technology-guided theme is to bring into discussion the consequences of these technologies when taken to the extreme. Since acts of surveillance and control are constantly being assimilated to the growth in technological devices' ability to access some once-hidden information, *Black Mirror* utilizes these themes to develop discussions about the new relationship with the technology that is being established. The series' fictional and non-fictional technologies illustrate, with a bit of, perhaps, premonitory perspective, how some aspects in life, including aspects of surveillance and control, are changed with the straighten relationship between people and their machines. The connection of the series with those themes corroborates with the idea that, in most episodes, the main focus is not on the aspect of the technology itself but on how it is used and what are its consequences in the context of the fictional society's peculiarities. These consequences are connected with the fact that citizen's information is being accessed and used to establish new social orders, organized hierarchically.

Among all *Black Mirror* episodes, the reason why I chose *The Entire History of You*, *Arkangel*, and *Crocodile* is mainly due to the way memory is accessed in the narratives, what magnifies the concerns about surveillance and control. Also, these are the episodes in which the hybridity of the characters, their prosthetic memory, is mostly explicit. Besides, in all the three episodes, the idea of crossing the line between the personal memories to the public access is massively debated in different forms, since each episode focus on a specific kind of relationship between the cyborg characters and their prosthetics. In *Arkangel*, for instance, the parallel with surveillance is seen more clearly, since the Arkangel System is specifically made with the purpose of providing a parental control prosthetics with the purpose of watching and monitoring children.

The three episodes show the prosthetics being used with the purpose of performing acts of surveillance and monitoring. The Grain, the Arkangel System and the Recaller can be put in parallel with surveillance tools within the context of each episode, and also be read through comparison with the panoptic model, in which, according to Foucault, subjects assume to be watched all the time. Therefore, prosthetic memory and surveillance are associated in the use of these prosthetics as a controlling method. The way how the Grain allows characters to constantly re-watch the memories in *The Entire History of You* demonstrate how the idea of omnipresence and control is disseminated by the prosthetics. The Arkangel System is the perfect example of surveillance being literalized through the total invasion and control of the child's life. Finally, the Recaller transforms the fictional society in *Crocodile* in a society in which surveillance is re-signified since the memories of people can be externalized and accessed to be used by law institutions. When transformed into an image easily accessible by third parties, memory becomes an object of consumption that serves the purposes of supervising and controlling, what places people in a system which mirrors the societies of discipline and control.

## 2.1 "VISIBILITY IS A TRAP"

For Foucault, omnipresence and visibility are the main artifices of the panopticon model. Greater is their importance to the model's operation that one of the most well-known lines from *Discipline and Punish* is related to these aspects, when Foucault states that, in the panoptic organization "visibility is a trap" (FOUCAULT, 1977, p. 200). The visibility and, consequently, the individualization of the one being observed is what makes the system of

discipline working. When the penal system changed from the use of the dark and isolated dungeons to the well-lighted and see-through cells of the panopticon, the judging gaze of the observer became capable of affecting the observed's behavior (FOUCAULT, 1977, p. 200). Contrary to the visibility of the ones observed, in Foucault's considerations, the action of power itself becomes invisible, because it is not possible to recognize who is and when is watching from the high tower. The surveillance is acknowledged and internalized in the prisoners' mind; therefore, it is what mostly makes the model function. It is the visibility that gives the observed the internalized knowledge that he or she is being watched, because in the panopticon cell, there is not a single spot in which the inmate can hide or avoid its body to be under the guard's observant gaze.

In Deleuze's continuity about Foucault studies on society, visibility also plays an important role in maintaining the constant power of control, as he considers technological advances that were not considered by Foucault due to the epoch his study was made. Visibility, within Deleuze's society of control, may be regarded as the form in which people become statistics, and as the way they are controlled by what is known about them, and by their performance on society. In contrast with the panoptic cell's visibility, Deleuze's stands as a metaphorical visibility, present as a tool in what he calls the perpetual metastability system that aims to control and manipulate individuals (DELEUZE, 1992, p. 4). Furthermore, regarding a more technologically developed and dependent society, the concept of control implies a bilateral relationship. Technology may control people, while people also are able to control technology, or at least their own personal use of it. Considering how the images of the prosthetic memory may work as tools for surveillance, the prosthetics are controlled by the cyborg characters while they are also controlled by the prosthetics, and specifically by the consequences of the memories' access and use. The establishment of this bilateral relationship of control is also part of a perpetual metastability system.

The main function of the panopticon architectural system is to promote visibility and evoke the sense of omnipresence regarding the observer, and the society of control contributes as a limitless and continuous form of exerting control over people. Then, it is possible to draw a parallel between these forms of organization and the prosthetic memory. First, because the relationship with technology and the construction of the prosthetic memory is playing the role of promoting an omnipresent surveillance, through the visibility, the exposure, and the manipulation of the individuals' memories by others, and especially by institutions. Second,



because the power relations created by the use of the prosthetic memory can be read similarly as to the panopticon and to the society of control models, it is hierarchized and diffused in almost every aspect of the episodes' fictional society. Being the panopticon and the society of control possibilities of constant monitoring of the individuals, the prosthetic memory can be put into comparison since it also serves the same purpose. Thus, it is noticeable that the materialization and access of personal memories by the government, by institutions, and by other individuals highlights the use of the prosthetic memory for means of surveillance and control. That is the reason why these prosthetics can be read as panoptic models.

Decades ago, Mark Poster (1990) already showed concern about the 'other forms' of panopticon that were rising due to developments of digital devices and their database of information. Poster named these relation to the storage of information a Superpanopticon, as stated in the quotation below.

Today's "circuits of communication" and the databases they generate constitute a Superpanopticon, a system of surveillance without walls, windows, towers or guards. The quantitative advances in the technologies of surveillance result in a qualitative change in the microphysics of power. (POSTER, 1990, p. 93)

Those different forms of panopticon discussed by Poster are closely related to technological advancements and to the data that is collected and disseminated about people who use such technologies. The internet will always turn out to be a good example for this kind of relationship, because there surveillance acts in a very subtle, sometimes unnoticed, but yet very invasive way of monitoring and gathering information about its users.

The prosthetic memory and the recorded images are similar to a database of the past, as it creates a storage of memory recordings to be visualized. For Foucault, by making the watched visible and individualized, the possibility of being watched immediately and unconsciously exerts power over them. Visibility, then, is one of Foucault's arguments throughout his debates about the successfulness of the model, drawing from the idea that the power within the panoptic model should be "visible and unverifiable" (p. 201), in order to promote discipline. It should be visible because the inmate would always be able to see the tower which guards the observer, and unverifiable because the inmate never knows when and if the observer's gaze is upon his/her direction at that exact moment. Regarding the memories' visibility, the existence of the prosthetic memory and the possibility of its materialization to the others' use marks the role of its visibility, since the once in natural state memory was the most personal and hidden part of the mind's ability to remember. In relation to its verifiability, the

materialized memory and its access in the episodes' case is shown to be assimilated as a common thing to be done; besides, the fact that the representation of memory now resides in a non-organic part of the body, I argue, somewhat transmits the idea that its content is not completely private, or personal, anymore. Although the visibility may give the idea that the observed would always pay attention to the observer, the fact that it is unverifiable is what create an internalized understanding of surveillance. As in the prosthetic memories, its exposure naturalizes and reproduces acts of surveillance.

The prosthetic materialization of the memories is what I will call the prosthetic visibility in this technological model of surveillance and control. It is the trap for the natural memory that goes through the process of being manipulated and externalized in the form of a consumable image. Those images were born on the same fundamental pillars of the panopticon, under the total visibility and promoting the idea of omnipresence. The prosthetic and materialized image of the memory is, then, the mechanical eyes that can see everything, from the exterior to the externalized interior of the memory, besides also making possible to see from the perspective of others' eyes. This is what I call the posthuman panopticon in *Black Mirror*.

## 2.2 PROSTHETIC MEMORY: THE POSTHUMAN PANOPTICON IN *BLACK MIRROR*

It is through the prosthetic memory that the three narratives of the episodes are linked with the concepts of surveillance and control. The prosthetic memory is also responsible for making possible the dialogue between the posthuman characters and a surveilling society. It is, indeed, the major point in understanding those fictional societies' peculiarities. Within the concept of the prosthetic memory lies the meeting of the posthuman subject with its digitally constructed memory and the new mode of surveillance that arises with it. Therefore, within the range of possibilities for surveillance made possible by technology, the scenario of posthumanism opens space for the prosthetic memory to perform the same role of modifier of social relations. Having established the beginning of this complex relationship, my aim, for this section, is to draw a parallel between Foucault's panoptic model, and Deleuze's society of control, and the prosthetic memory in order to investigate their points of convergence.

On one hand there is the panoptic model, so extensively studied by Foucault and the symbol for a hierarchized organization of space and time; on the other, there is the prosthetic memory, born from the intersection of the memory processes mediated by technology. The understanding of the mediation here not only stands for its literal meaning, but this intersection

also follows Andrew Hoskins' concept of *mediatisation of memory*, which is referred "to the impact of the media upon processes of social change so that everyday life is increasingly embedded in the mediascape"<sup>9</sup> (HOSKINS, 2009, p. 29). The passage of the internal process of remembrance to the external materialization of the memory as image conforms with Hoskins understanding of a new way of thinking about memory which is based on the way "media functions as an externalization of inner processes, sensations, thoughts and memories", as well as on the sharing of the memories through digital media (HOSKINS, 2009, p.11). The mediated memory, then, is clearly connected to the concepts of visibility, due to its imagetic characteristics and to the way in which it becomes available to be accessed by other people and by institutions with controlling aims. According to Hoskins, "the new media of memory render a past that is not only potentially more visible, accessible and fluid than that which preceded it, but that also seems at one level more easily revocable and subject to a different kind of 'collective' influence and shaping" (HOSKINS, 2009, p. 29). Therefore, what is important to highlight about the three prosthetics is the way in which memory is modified or manipulated by them, how they come to materialize the memory, and last, but not least important, to discuss the visibility and accessibility of the memory.

First, the biggest point of convergence is the way the prosthetics materializes the memories. The memory becomes image through the perspective of the cyborgs' eyes, as the visual experience becomes the point of departure for the construction of the prosthetic memory. The prosthetics called Grain, in *The Entire History of You*, is the one more strictly related to the concept of prosthetic memory, since it is literally, and basically, a device of memory storage and access. The visual experience of the characters is recorded by the Grain and remain available to endless 'redos', as they call it, or replays, to be watched over and over again, as if past moments became videos stored in this small subcutaneously implanted technology. The materialization is taken to the extreme in this episode, as the memories are shown to be treated as packs of videos in a timeline, a faithful reproduction, ready to be browsed and re-watched on the characters' eye line, or in any external screen, such as a television or a cellphone. The Arkangel System materializes the image in an almost identical way than the Grain, since the parental security system allows the one in possession of its control unit to simultaneously watch

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<sup>9</sup> The term mediascape was coined by Arjun Appadurai in the article *Disjuncture and Difference in the Global Cultural Economy* (1990), it refers, according to him, "both to the distribution of the electronic capabilities to produce and disseminate information [...] and to the images of the world created by these media." (299). Mediascape is, as Appadurai writes, "image-based and narrative-based accounts of strips of reality" (299).

the visual experience of the child, whose experience remains stored in the system's memory timeline. Regarding the materialization, the Recaller is the prosthetics that works in a slightly different way, and more primitive regarding its technology and its quality of the image reconstructed. When temporarily connected to the memory recreation system, the characters go through a mediated process of remembrance, and the Recaller is only the medium which is capable to transform the process happening inside the user's mind into a vivid representation on the screen, only then such images can be recorded and stored as video or pictures.

The second point of convergence between the prosthetics is the access to memory, which can be said to be done in similar ways through the materialization, having as a final product the literal image of the memory for consumption. Yet, in the three prosthetics the access happens in a different manner. The Grain is the prosthetics that allows the cyborg characters to access their own memories at their will, at any time and place. Making possible endless replays of a specific chosen moment from their lives. The Arkangel System is slightly different because the control of the prosthetics is not in the possession of the cyborg child, but with the parent. Finally, being a temporarily enhancement, the use of the Recaller is controlled by the State and law authorities only, making the prosthetic memory being accessed mainly by other people. Understanding the accessibility is crucial to map how the memory is changed as it is constructed into a prosthetic memory, and how the access to a personal issue may be hierarchized and controlled by others.

It is in the details of the panopticon's fundamental bases that lies the possibility for this correlation, especially focusing on the sense of omnipresence. With the possibility of access of the memory, for these cyborgs characters, the panopticon's guard is transformed into a small device that brings the once private and subjective memory to the surface of the public and objective eyes of others. If the panopticon inmates were controlled by and lost their privacy to the constant eyes of the high tower, *Black Mirror's* cyborgs lose the privacy of their own memory, which is re-signified due to the way it is widely accessed and consumed. When the memory becomes public and subject to the use of others, it immediately increases the quantity of data one can grasp from an individual, increasing consequently the way surveillance is done and the extent of the relationships of control that are formed. After all, the prosthetic memory is a symbol of the coexistence of the human body with technological prosthetics, thus, each episode deals with a specific kind of prosthetics, and according to their functionality, and they spark different concerns relating the prosthetic memory, surveillance and control.

These different forms of access to the prosthetic memory leads the conversation back to Foucault (1977), who, in his observations about the panopticon, clearly established the reasons why the model could be used to understand and analyze most social organizations. In his examples, some institutions are extensively used to demonstrate the similarities with the prison model, they are the school, the hospital, the working place, and basically all the organized spheres an individual is inserted in throughout a lifetime. All of those carry, according to Foucault, the main characteristics of organization of space and time so that the power of visibility, omnipresence, hierarchy, and individualization should work. Those are, undoubtedly, institutions that have not changed much since Foucault's study, or even, since their own origin. Regarding the prosthetics in each episode, I argue that not only there are social institutions in which they would fit in, but also that they promote panoptic views on the use of technology and its consequences on these social organizations.

The prosthetics are related to social organizations in their specific contexts. I intend to pursue the categorization of each prosthetics within the social spheres and problematics they are inserted. There are many points of convergence in the reading of the three prosthetics due to their similarity; therefore, discussions on the private and public spheres, as well as on the organization of social life, are not exclusively related to one episode's peculiarity, and, thus, these themes are pertinent to deal with all three. Some forms of surveillance and control are shared in the three episodes, while others are highlighted by one episode in specific. The institutionalized surveillance, for instance, is common to the three prosthetics, since all are immersed in a system of surveillance that may be defined as happening from top to bottom, in the sense of coming from the institutions to individuals and reaching their private space. Those institutions range from the social sphere, as the law institution, to the personal, such as marriage institution. Within this range, and taking into consideration Foucault's assertion that every institution may resemble the panoptic model, complemented by Deleuze's allegation that control is disseminated in all parts of society, I look at one specific institution in each episode.

In *The Entire History of You*, due to the total access of memory, the Grain increases the surveillance and control over the characters' personal and social life. In this episode, the marriage institution is on focus as the prosthetics is used as a form of monitoring and manipulating tool between the couple, specifically from husband to wife. Here the prosthetics are used in order to demonstrate aspects of the couple's relationship and questions of power, the husband's obsession for controlling the wife's life and her relationship with others is the

spark for the episode's plot. In this sense, this episode is focused on the discussion of who is under the target of surveillance and control, and who are the ones who promote and perform them. *The Entire History of You* approaches the use of the prosthetic memory allowing a panoptic relationship within the marriage institution, which implies the establishment of power relations in a context that words are less meaningful than the prosthetic memory's image, which guides a surveilling and controlling society.

*Arkangel* is focused, on a broader sense, in the family institution, specifically concerning the relationship between a solo mother and only daughter, and the control and censorship the former faces due to the use of the Arkangel prosthetics, which works as a parental control system. Sided with the technological issue is the fact that that they are not a nuclear family, thus, that mother's role on that society is challenged and it reinforces the need for the Arkangel system's aid. The use of the Arkangel System starts as a method of surveillance toward the child, encouraged by the mother's fear and insecurities after having her daughter lost for a few hours, then it develops to a controlling relationship, showing how the mother's obsession over her daughter's life and the lack of a trustworthy mother-daughter relationship leads mother to the constant control over daughter's life and bodily choices.

Lastly, with a narrative that is more precisely related to the idea of the panopticon as a tool of the law and state, the disciplinary and controlling society of *Crocodile* revolves around the state institution and the mandatory requisition of citizens to make their memories available to the authorities in case of being involved in some disorder on society, whether it be as a criminal, victim, or witness. This episode also approaches questions of violence and the memory access as a motif of rebelling the technologically constructed disciplinary society that is presented in this posthuman panopticon. *Crocodile*, in its turn, approaches the use of the Recaller, a machine capable of prosthetically reconstruct the memory. This episode brings the concerns about the vulnerability of the cyborg characters, as well as reflections about the involuntary and invasive memory access, as it establishes an obliged, controlled and hierarchically organized access of memories.

Each prosthetics, then, approaches themes related to a specific kind of institution which means that acts of surveillance and control in each episode work accordingly to these institutions. All three are under the institutionalized gaze, what changes is the surveillance figures and the power relations established by who gets to watch and who is submitted to the watcher's gaze. By understanding the context of each prosthetics, and the episodes'

categorization within each one of these main institutions, it becomes possible to establish a more refined line of thought regarding the themes to be discussed about them in the analysis presented in the following chapter of this thesis, since my treatment of each episode is guided by this division based on the main institutions to which I assume each episode is belonging.

### 2.3 CINEMATIC CONCEPTS FOR THE EPISODES' ANALYSIS

In the analysis of the prosthetic memory in relation to surveillance and control, considering each episode's narrative and visual elements, I investigate how the episodes deal with the construction of the prosthetic memory, and how it is materialized as an image through the Grain, the Arkangel System, and the Recaller, as well as I explore the parallel of the prosthetic memory construction with the panoptic model and the society of control.

In order to proceed with the analysis, there is the need to establish some theoretical support for the development of the next chapters. I have already delineated some of the major theories important to the understanding of *Black Mirror's* fictional society, such as posthumanism, prosthetic memory and surveillance studies on the panopticon. In addition to those, I approach some concepts regarding cinematography, which will be essential to the complete analysis of the episodes. Considering my focus on their content as a whole, I depart from Bordwell and Thompson's (2012) definition of narrative, which, according to them, is "a chain of events linked by cause and effect and occurring in time and space" (73). Moreover, the fact that memory issues and the construction of a prosthetic memory are deeply related to the notion of time requires an understanding of the aspects of narrative. Time becomes important because of the modifications provided by the access of the memory and the construction of the prosthetic memory, and also due to the alterations in most characters' visual experience and consequently their own detachment of reality, as it will be discussed on next chapter.

As follows, the notion of time becomes essential for the analysis of the three episodes, since their narrative deals with the prosthetic memory, which is something that interferes in the chronological references of time, past and present. In these episodes, past and present are not established in the most usual way. For Bordwell and Thompson (2012), time is manipulated in order to demonstrate some characteristics to the story; for that, frequency, duration and the question of order are essential. Therefore, they will be of a great support in the actual analysis of the scenes. Thus, cinematic time can be considered in relation to the present, the future, dreaming time, consuming time, and fractured time, according to Hellen Powell (2012). Within

the studies of the manners each type of time can be represented in a narrative, Powell implement those manners with what she calls the “*time in the digital age*”, a time considered by the author to be a divergence form real time. Powell’s main argument is that with the increase of the life online and the use of digital devices, the reference from the ‘*time-of-the clock*’ should be reconsidered when dealing with it as a means of understand time (POWELL, 2012, 149).

The overall construction of the scenes is essentially important given the focus on the prosthetics and the materialized memory, aspects such as *mise-en-scene* and editing are going to be present on the following chapters. As defined by Bordwell and Thompson (2012), *mise-en-scene* accounts for the many elements of the movie making, such as setting, costume and makeup, lighting, and also acting and performance. Editing, on the other hand, consists on the cut and assemblage of various shots in a determined order of appearance and length; it is the building up of the scenes’ sequence and can also be essential to understand time. Through these elements, what is put into the creation of the episodes can be understood in the many layers of their formation, and it is in their arrangement that it becomes possible to better read the episodes’ meanings.



### 3 EPISODES' ANALYSIS

This chapter is divided in three parts, each one dedicated to the analysis of one of the three episodes, respectively *The Entire History of You*, *Arkangel*, and *Crocodile*. The presentation of the analysis follows the order of appearance of the episodes in the series, although this organization is not relevant, as they are independent episodes. Their similarities, though, will be highlighted throughout the discussion of each prosthetic memory in relation to acts of surveillance and control. The three prosthetics (the Grain, the Arkangel, and the Recaller) will be deeply analyzed in the context of each episode's fictional society organization and regarding the establishment of a panoptic model with the aid of these technologies. Thus, in each of the following subchapters I focus on how the episode can be read as a posthuman panopticon, and how the prosthetic memory is being used as a tool for surveillance and control.

#### 3.1 *THE ENTIRE HISTORY OF YOU*: PROSTHETIC MEMORY IS FOR LIVING IN CONSTANT OBSERVATION

*The Entire History of You* (henceforth abbreviated to *TEHOY*) pictures a fictional society in which most of the people are users of a prosthetic device called Grain, a technology that enables them to have access to a recorded archive of their memory. The episode presents the Grain in one of the first scenes by means of an advertisement, which appears on the taxi's screen when Liam, one of the main characters, connects his Grain to it (Figure 3). With this advertisement, the company Willow Grain demonstrates how easy and cheap it is to have a Grain device implanted, a very small technology in the size of a rice's grain which is placed subcutaneously behind people's ear. Besides that, the company aims at selling an upgrade of the device, by offering the advantage of receiving three decades of memory backup for free. Through this glimpse on how the technology works, Willow Grain highlights all the benefits of its functions, especially the access to a full spectrum memory. Emphasizing their product's necessity on people's lives, the advertisement closes with the appeal of their motto: Memory is for living.

**Figure 3** - Willow Grain's advertisement and the connection of Liam's Grain to a taxi's screen.



Source: Netflix.

*TEHOY* demonstrates how the prosthetic memory becomes an essential element on every aspect of characters' life and a shaper of their social relations, since even the characters who do not use the Grain are affected by its existence. Within this context of the memory watching, the episode's main focus is on the married couple, Ffion and Liam, and how they deal with conflicts in their relationship that are increased by the use of the Grain and its access to the recorded memories. In the beginning of the episode, Liam leaves a job appraisal in another town and flies back to meet Ffion at her friends' gathering (Figure 4). Arriving there, Liam sees Ffion talking with another man, Jonas, and then he becomes suspicious about her behavior toward Jonas. From that moment on, Liam starts acting in a paranoid way, and he spends the whole night drinking and re-watching the memories in which he saw Ffion and Jonas together, in order to track any hint that can confirm his suspicions about Ffion's infidelity. Ffion, then, admits that she had already been in a relationship with Jonas in the past, which is why Liam had the impression that there was something strange between them, but Liam does not seem to be satisfied with her side of the story. In addition to that, Liam, now knowing that Ffion had a relationship with Jonas, is bothered by the fact that Jonas said to everyone that he keeps watching the memories of the sexual encounters he had with his previous partners as pornography.

**Figure 4** - At the dinner table, Ffion and her friends watch some old memories on the screens.



Source: Netflix.

The next morning, a drunken Liam goes to Jonas' house (Figure 5), even though the Grain had alerted him that he should not drive in his condition, and any accidents caused under the alcohol effect would be not covered by his insurance; this scene already demonstrates a discreet characteristic of the device's role of surveillance and control over its users. Ignoring the alert, Liam drives to Jonas's and violently threatens him, he forces Jonas to erase all his memories of the sexual relations he had with Ffion. Later on, re-watching the memory of his confrontation with Jonas, Liam is able to zoom the image and see in Jonas's Grain timeline that he had recently been with Ffion in their own house. Afraid that he is not the biological father of his daughter, Liam returns to his house and demands that Ffion show him the memory of that specific sexual encounter in order to prove that they used a condom, because the date concurred with the period of time Ffion got pregnant. Reluctantly, Ffion projects her memory, and from the scene it is presumed that Liam finds out that the two had unprotected sex, since, by the end of the episode, Liam is shown alone in their house, constantly watching happy memories with Ffion and with the baby, until he decides to take a razor blade and remove his own Grain.

**Figure 5** - The Grain's alcohol alert.



Source: Netflix.

It becomes clear by the episode's development that the majority of the population lives with the prosthetics, even the newborn daughter of Ffion and Liam. Those who choose not to use it are seen with wary eyes by society, and compared to delinquents. The Grain works as an expandable memory, since it allows the characters' to record and access all their visual experiences, thus, with this device, the users are able not only to watch their memories, and to zoom the memories' *'scenes'* in order to obtain different perspectives, but also to stream their memory at screens, and other electronic devices, to be seen by others. By providing an easy way of confirming the veracity of past's information and happenings, its consequence for the Grainless people (as the non-users are called) is that they are treated suspiciously, since they have no memory to show and to guarantee they are trustworthy. The Grain, then, appears as a possibility for an endless re-visitation and resignification of the past, and also as a form of organization and monitoring in society.

The Willow Grain's motto appears right before Liam is connecting his prosthetics to project on the taxi screen the memory of the job appraisal he just had. So, he rewinds the Grain into a few minutes before in his recordings' timeline, and gets to have an outsider's view of a recent event from his own life. The ambiguity of the motto can be spotted as the Grain is gradually presented. Memory is for living, in the sense that allows decades of back-up, as the

advertisement demonstrates with the appealing promise of a memory that lasts freshly throughout one's whole life. Though, considering the posthumanist aspect of the living with these prosthetic memories, the motto also corroborates to the idea of a different form of living. A form of living some moments of life again and again, always revisiting the same recorded memory, and leaving behind the natural and flawed way of remembering. The prosthetic memory allows the cyborg characters to keep living the already lived moments of life, consequently giving them other meanings and usefulness. For instance, the scene in which Jonas tells the other characters that he frequently uses his memories of sexual encounters as pornography instead of being with his actual partner is just one of many that can serve as example to demonstrate how the prosthetic memory tends to make them revisit the same experiences instead of experiencing and exploring real life.

The Grain's main characteristic is the power of recording and access of the character's memory. The act of accessing every and each moment recorded in the prosthetics is what makes possible the idea of wandering through those memories, creating what can be said to be an intertwined narrative of the cyborg characters' lives. A complete audio-visual-based narrative of their lives, to be accessed at any time, to compensate a flawed natural memory. I call it a narrative, because it is no longer present, nor exactly a natural past recollection. It is a specific representation of the past, a credible and immutable one, created with the aid of one's visual and auditory recordings and perspective of the events. Nonetheless, the narrative provided by the prosthetic memory is constantly meeting with the present, and, although the image recorded cannot be modified and reconstructed as a natural memory is during different remembrances, it is capable of generating different perspectives and readings of a same event, since the cyborg characters can look at those memories as outsiders, being able to endlessly re-watch them for details.

In this posthuman panopticon of the Grain's prosthetic memory, the timeline of the prosthetics resembles the format of a catalog where each days' memories, acquaintances' identities, places, events, and names, are available to be objects of a search for a specific memory one chooses to watch, the same way someone can search for a movie on a streaming platform. Given this interface between body and prosthetics, I highlight the co-evolving relationship between the prosthetic narrative of life getting in touch and re-signifying real life each time they encounter, that is: each time a memory is revisited by the Grain it affects how that character will act on reality. Figure 6, below, shows Liam's timeline as he searches for a

memory that makes him remember who Ffion's friends are, their names, and from where he had met them, before going to their house.

**Figure 6** - Liam using the prosthetic memory to remember who Ffion's friends are.



Source: Netflix.

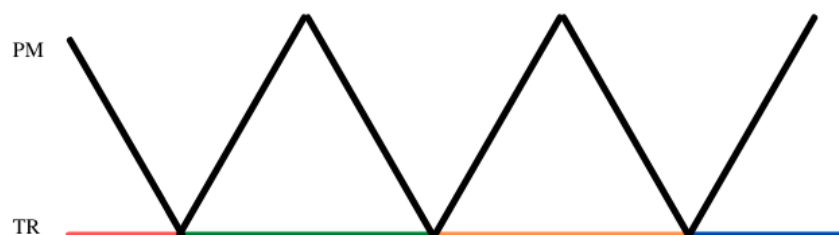
Based on the idea of this intertwined narratives, these cyborg characters constantly have two lines of events in their lives. One of them is the prosthetic memory, constructed with the full spectrum recording of the events. Being artificially constructed, this line is not mutable as a natural memory is, considering the studies of memory shown previously. If, on one hand, the natural memory is gradually being modified and forgotten as the brain keeps accessing it and adding new layers of interpretation to it; on the other hand, the prosthetic memory is a stable and fixed recording, always the same when accessed. In this sense, the prosthetic memory narrative can be said to be a literal representation of one's memories, as if people were born with a recording camera that could register everything they live. The second line in this intertwined narrative is the real life itself and the natural memories. Life has served as material for creating the memories and, thus, the prosthetic memory in the Grain. But the timeline of real life is not linear as the prosthetic memory is, because it becomes interpolated by the interferences of the prosthetic memory access and by the use of this technology. Life happens,

prosthetic memories are created and accessed, and life (reality) itself is changed, in many and different levels, by the existence of this recorded memories and their easy accessibility.

Referring back to Bergson's studies on memory, the author had established that when a memory was remembered, this same memory would be resignified and changed. Which means that the memories remembered would never be originally the exact representation of what happened in the past, due to one's modification, interpretation, forgetfulness, and resignification of it. Differently from that, in this prosthetic memory arrangement, the prosthetic memories are a constant while the present is resignified by the encountering with a flawless memory. Furthermore, the prosthetic memory, being a fixed, easily accessible, and trustable material becomes a tool for confronting the present with the accuracy and certainty that the present needs when reassessing the past.

I attempt to demonstrate the Grain's new relationship with memory and the idea of the intertwined narratives with Figure 7. Each time the prosthetic memory is used, it means that a specific recorded memory is accessed in the present, in reality's timeline, and then this encounter changes the present due to a new perspective one acquires about a given event. The prosthetic memories always stay the same, because they are fixed and immutable, what changes is the present with the *re-doing* of a given memory and with a new perspective that the *re-doing* brings to real life. Thus, the intertwined narrative of the cyborgs' lives is a result of the constant relationship between prosthetic memory and present. In the image below there is an attempt to visualize this interference. The line TR, the timeline of reality, or, in a simpler term, the cyborg characters' present lives, is constantly intersected by the access of the prosthetic memory (PM). In the moment of this intersection, the prosthetic memory changes how reality is perceived, consequently modifying it, here specified as a change of color.

**Figure 7** - The relationship between prosthetic memory and present (timeline of reality); the prosthetic memory affecting the present.



Source: My illustration.

Taking the scene mentioned before as an example (Figure 6), in which Liam uses the prosthetic memory to have access to Ffion's friends' names before going to their house. Liam's natural memory had failed him, since he is not able to remember who they are. Then, he appeals to the use of the prosthetic memory, and, by having access to the exact moment he met the couple, his reality is changed. It is due to the prosthetic memory that Liam demonstrates a specific behavior, arriving there and introducing himself as someone who remembers very well the hosts and how they met, years ago, at a wedding in Dublin. Without the aid of the prosthetic memory, he would not act as he did, that is why the access of the prosthetic memory is the one to blame for the change in the course of his actions, for affecting his present.

The way the prosthetic memory is highlighted to be more efficient than a real memory in *TEHOY* is what makes this new relationship possible. There is a minor character who works in the Grain's manufacturing, and her knowledge about how flawed are the natural memories is the reason why she is highly against the idea of living without the prosthetics' guarantee of a trustable past. Also, the fact that Liam is able to access a reliable memory of the moments in which he was drunk, after being unconscious, is the very best example of the Grain's exact account of the past, and its interferences on present. The accuracy of the prosthetic memory, then, is what transforms it in a tool of surveillance and control on *TEHOY*'s posthuman panopticon, because it can be taken as a form of omnipresent watcher. Thus, the prosthetic memory's use ranges from the state and institutions, to all the common citizens and infants. Being a reliable information about someone's life experience, the prosthetic memory is then used and handled as such, allowing the digital timeline of memories to keep interfering in the real life's course line.

The connection of the Grain's prosthetic memory with the senses of the vision, transforms surveillance in a constant act, unless one decides to go Grainless, which is not a common practice. The eyes, the watcher, were already important for the panopticon, but they turn out to be even more important in the posthuman panopticon of *TEHOY*. The visual experience is recorded and stored in its completeness, therefore, whoever watches those memories have access to all that the eyes of the cyborg characters could see, promoting an idea of an interminable surveillance. As long as the Grain is functioning and the human-machine hybridization is maintained, surveillance happens. It also can be said that the memories enhance the senses of surveillance and control in its users, since, whenever the present is interpolated



with recorded images of the past, those images are used and manipulated to serve the purpose of inquiry about a given event and about the people involved in it. In *TEHOY* it is rare to see the prosthetic memory being used as just a window to the past, in the sense of enjoying the memories for one's own pleasure of remembering. The only moment in which the prosthetic memory is shown having this purpose is when, in the group of Ffion's friends, one of them streams a memory of the 'old days' of their friendship (as shown by Figure 4), which is a memory that shows them having fun in a night club. Another moment is already after Liam had confronted Jonas and Ffion, when, at the end of the episode he is shown alone *re-doing* the happy moments he shared with Ffion and baby Jodie. Those are, undoubtedly, scenes in which the prosthetic memory is being used purely to the purpose of revisiting some past joyful moment, when its access is immune of second intentions.

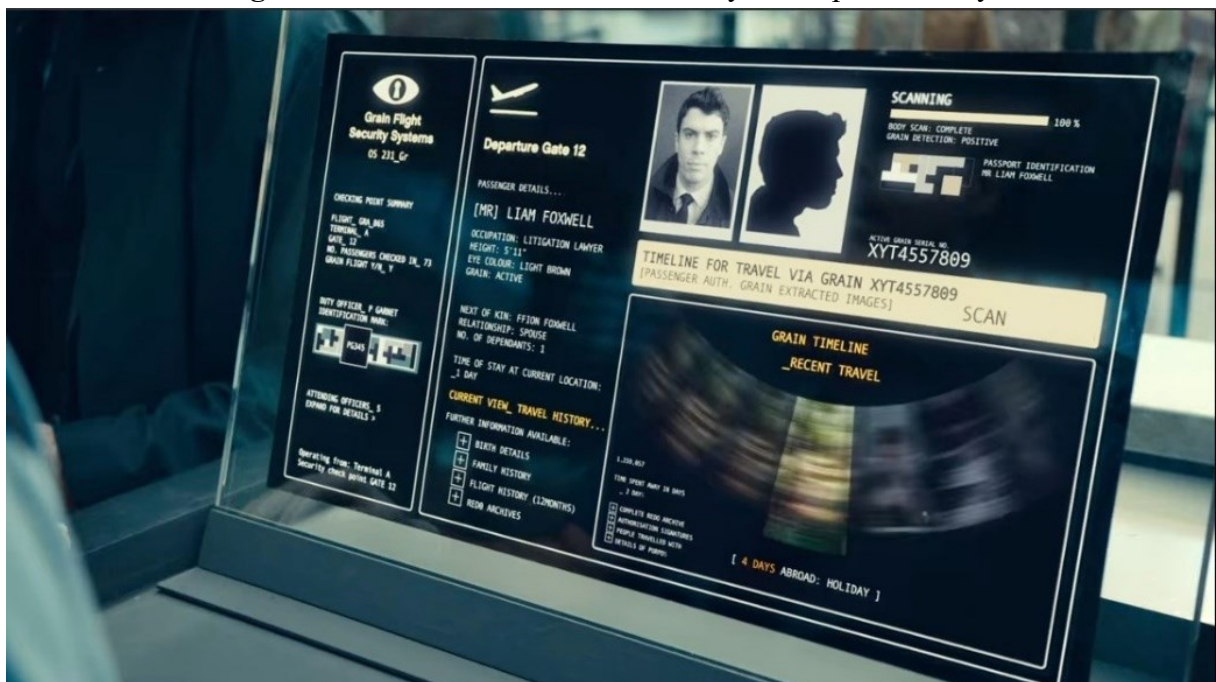
Once the Grain is functioning, there is no point of invisibility, or a place out of the prosthetics' omnipresence, hence, the Grain offers an interminable surveillance. In addition to that, there is also the issues of the anatomical dangers of the prosthetics, it is stated that the removing of the Grain, if made incorrectly, may cause severe damages to the eyes. Putting it into an extreme situation, or one does see everything with all the Grain's functions, or one may not be able to see at all. It puts the cyborg characters in an internal dilemma of being a cyborg and consequently facing the prosthetics' changes on their lives, or go Grainless and become part of a segregated parcel of society. The eyes and consequently the visual experience, from all the senses, is the one that forms a perception from reality, a perception that can be reconsidered and modified with the access of their own eyes' experience as an outsider. If the panopticon etymologically is the *pan optikos*, then the Grain establishes the perfect environment for a pan-optic society to happen.

As I briefly pointed out in the second chapter, in the light of Foucault's panopticon, *TEHOY* is mostly focused on the institution of marriage. The episode's conflicts revolve around Liam's and Ffion's relationship, and it focuses specifically on how Liam becomes progressively obsessed with watching the memories, which turns into control over Ffion and other characters. In *TEHOY* the Grain symbolizes the interplay of memory, control and the obsession about the past. Thus, what I aim to develop in this section is how the prosthetic memory is present in the state institution, increasing the discrimination between people due to the use of the Grain as social control. Then, I focus specifically on how the prosthetic memory allows for a panoptic relationship within the marriage institution, which implies the establishment of power relations

between the couple and the playing with the positions of watcher (controller) and observed (controlled).

The network of surveillance within the Grain's context is, somehow, demonstrated along with the episode's narrative, and it can be perceived to be following a hierarchized pattern, if taking in to consideration the whole net of the characters' use of the Grain. The stances of surveillance can be separated initially into public and private. One of the first scenes in which the Grain is shown in action is a perfect example of state and institutional surveillance. In this scene (Figure 8), Liam is at the boarding area of the airport and the admission procedure involves a security scan of his memories of the past days in full speed, in this scan it is possible to see that the security's computer system is able to identify all the people Liam had contact with, including complete files on Ffion (which is identified by the system as his wife) and on baby Jodie (identified as his daughter), his whereabouts and his final destination.

**Figure 8** - Liam's Grain is monitored by the airport security.



Source: Netflix

It is also noticeable that the airport separates people according to their use of the Grain, suggesting that a different treatment and judgment of the characters is made according to how much reliable information the security is able to gather from them. The Grain is an element that has been incorporated to the society's context, although, it is important to consider that its use is not mandatory to every citizen, this statement is implied from the *mise-en-scene* of the airport

sequence (Figure 9), in which there becomes visible two boarding areas, one for the users of the Grain (those who presumably will go through the same Grain inspection as Liam), and one for the Grainless, whose method of inquiring and boarding procedure is unknown. This division clearly resemble the citizen/foreigner categorization established in the airports, where the citizens of the country are the ones who have an easier access, less bureaucracy, and more reliability. From this scene is implied, then, the importance of the Grain for the creation of a social order in which possessing the prosthetics is crucial for acquiring a status of belonging to that society. Furthermore, the prosthetic memory serves as a statement of that specific citizen's worth of making part of that society as a free person, since this boarding inspection scene suggests the security's intentions of detecting whether there is any illicit or suspicious act recorded/committed in the citizen's recent past.

**Figure 9** - Non-grain Departures implying the discrimination between Grain users and non-users.



Source: Netflix.

It is on the difference between the cyborg characters and the Grainless characters that the social importance of the prosthetic memory is highlighted. A practical example of that is in the scene in which Liam threatens Jonas with a broken bottle of glass. Hallam, the only Grainless character, tries to call the police, but they do not take her seriously because she has no prosthetic memory to prove them that what she is denouncing is really happening, plus she

cannot provide any image of the ongoing fight. The police leave her (and consequently Jonas) to her own fate. Because she had no way of showing her memories to the authorities, she becomes almost invisible to them, and, in addition to that, highlighting Hallam and other Grainless' invisibility, at the dinner table scene she is also compared to hookers and delinquents because she does not use the Grain. Although she is a minor character, her Grainless condition is responsible for presenting some of the most complex details about *TEHOY*'s society. It is through her story that we have another evidence of the Grain's use not being obligatory. Moreover, she not only denounces a criminal plot involving the robbery of Grains to have the recorded memories served as pornography, but she also demonstrates to be an advocate of the Grainless life, as she states that since hers was robbed, she felt better without and decided for not have it implanted again (Figure 10). Besides that, she exposes how neglected the Grainless citizens are, as she is put in a lower position in society, a position of invisibility, as if her existence lost value since she is not able to provide images for the surveilling and controlling system.

**Figure 10** - Hallam shows the scar where her Grain was taken by force.



Source: Netflix.

In addition to those scenes focusing on how Hallam is treated, the company in which Liam was applying for a job requires him to do a “*big-redo*” as part of his appraisal, a procedure

that serves the purpose of tracing back any suspicious and unwanted past behavior from their possible employee, which also implies a struggle for the Grainless to be accepted socially. These two moments on the episode, with Liam and Hallam, consequently, are contrasts that highlight the importance of the prosthetic memory in order to hierarchize the citizens and maintain a system of surveillance and control. The way the Grain is inserted as a mechanism of that society could be said to be what produce *docile bodies*, a state of internalized obedience in the panopticon (FOUCAULT, 1977). Foucault argues that the disciplinary power acts on individuals in order to create the so-called ‘*docile bodies*’, which are very well described by the name itself: bodies/people that are docile/obedient/compliant/submissive to the system. Therefore, although the use of the Grain is not mandatory, there is a complex system that leads people to use the prosthetic in order to survive in that society’s organization. Being outside the eyes of the institutions, Hallam becomes less important than those who corroborate with the maintenance of the discipline and control.

Considering the Grain as a mechanism to establish control and produce the docile citizens, it also has an effect on the Grain users, specifically Liam. When living in such social arrangement of surveillance and control, he internalizes the constant monitoring of his life and also extends this characteristic of the Grain to his personal relationship with Ffion. As I am going to demonstrate later with some scenes analysis, Liam uses the Grain in a manner that, with the prosthetics surveillance, he constantly attempts to ‘*docilize*’ his wife. This is clearly a reflection of an already established patriarchal organization of the society, and, despite the technology involved, while these polarized forms of controlling organization are maintained, they will continue to mold people in the same way. Being the watcher, the oppressive side of the panoptic organization, Liam, consequently, assumes the role of the watcher and controller of his wife’s life. He assumes a very panoptic role of trying to maintain the others submissive to his will.

Those are scenes that highlight the social importance of the Grain’s reliability and also demonstrate how surveillance is a central issue in the fictional society of *TEHOY*, the characters’ lives are surrounded by details based on controlling methods through the images of the prosthetics, which possibly leads them to assume the same position in face of the Grain’s use. They are monitored by state institutions and big companies, within the justification of security and welfare, thus, they pass on this habit to their private lives, as exemplified by Liam, whose main life aspects are based on the use of the Grain, his permission to travel, his job

opportunity, his social interactions, and his own marriage. A network of surveillance and control is created and sustained by the prosthetics. As the episode's chronology is presented, Liam is shown being monitored by higher institutions, which possibly leads him to adopt the same behavior of monitoring Ffion, who controls baby Jodie's Grain in an attempt to monitor the babysitter's conduct. Ultimately, both characters use the Grain in order to monitor each other, as much as to confront each other with the veracity of the prosthetic memory. The connections between these instances of surveillance and control are the dividing point in the separation of the scenes for analysis. Having discussed the social and institutional aspects of the Grain, and how the prosthetic memory molds *TEHOY'S* society. I now briefly approach the issue of self-surveillance, and then I focus particularly on the marriage institution and how surveillance and control are reflected, and reinforced, by the power relations between Liam and Ffion.

Although the prosthetic is being read in the context of the establishment of surveillance and control, the episode presents the Grain as a personal assistant for memory. It is advertised as an individual experience of remembering life events in a very accessible and trustable way, but the prosthetic memory not only serves as a way of viewing the past events, but also used as a form of self-surveillance. Recalling my previous parallel of the series' name with the symbolism of the mirror, I now state that this specific prosthetic device in *TEHOY* is also serving as a mirror for the characters' contemplation of their own life. Characters use the prosthetic memory not only to enjoy a past memory, but also to speculate about chosen moments and its participants. This is the case of Liam, regarding his job appraisal. He deals with the anxiety of waiting for the company's response by watching the memories of the appraisal in the search for any hint given by people's speech and body language.

The act of self-watching does not exactly conform to the idea of surveillance in the sense of being monitored or controlled, but it extends these ideas to what is being watched. Liam adds to his life another layer of worries as he keeps *re-doing* his meeting with the possible employers in order to observe their behavior, and his own life gets interfered with the different perceptions he has about the same memory. From his way out of the appraisal until the moment he leaves Ffion's friend's house, he watches and evaluates the memory more than once, not only alone, but also taking into consideration Ffion's interpretation of the appraisal. The anxiety about getting the job or not is increased as Liam keeps trying to anticipate a rejection by judging himself through what he sees in the prosthetic memory.

Self-surveillance as a primary motif for the access of the prosthetic memory is shown on the scene where Liam wakes up after having crashed his car (Figure 11). Liam was drunk during his visit to Jonas's house, and his first thought after waking up in the crashed car is to access his Grain and let the prosthetic memory remind his blacked-out mind of what have happened. It is through the prosthetic memory, then, that he got informed of everything he did under the influence of alcohol. He revisits, with apparent shock, the moment in which he attacks Jonas and forces him to delete all his memories with Ffion. Moreover, one aspect of importance in this scene's close up is the change of the eyes' appearance. It is a detail that indicates whether the Grain is being used or not, but, in terms of meaning, it can be read as another indication of the imprisonment of the cyborg characters in the past representation. While the memory is being watched, the real self stays in standby, detached from reality.

**Figure 11** - Liam watches the memory of his confrontation with Jonas.



Source: Netflix.

There is also a suggestive meaning of similarity to a blinded eye appearance, whitened and static, suggesting a metaphorical meaning that, while the prosthetic memory is being used, the characters are living the memory and not reality. The prosthetic memory is able to show everything with precision, thus, the real eyes' function is momentarily disabled, which makes the immersion in the prosthetic memory much greater than when it is streamed on a screen. The same happens when Ffion and Liam are using the prosthetic memory while having sex. In their

Grains, they *re-do* a moment in which their sex was much more enjoyable, while in reality they seem detached from what is happening and living in that specific memory (Figure 12). Despite this individual detachment from reality, it is, however, through the accessing of the prosthetic memory in the car crash scene that Liam discovers the affair between Ffion and Jonas. The date of a memory on Jonas's timeline is the final clue for Liam. Therefore, the self-surveillance led Liam to pay attention in the details of Jonas's Grain's timeline, which implies that the self-surveillance may always lead to the surveillance of others, whenever there are people present in the prosthetic memory's events. This is sustained by the fact that, in the whole episode, there is not a single use of the prosthetic memory being used to access a memory in which the character is alone. The memories recalled are always regarding a social interaction.

**Figure 12** - Liam and Ffion detached from reality by their Grains.



Source: Netflix.

The beginning of the episode successfully presents Liam's job appraisal scene as a form to explore the Grain's technology. The main conflict of the episode, however, comes forth as Liam meets Ffion at her friends' gathering, and, from this point on, it becomes clear that *TEHOY's* posthuman panopticon is focused on issues concerning surveillance and control within the marriage institution. More specifically, on how the relationships of surveillance and control are constructed and intensified with the access to the Grain's prosthetic memory. Along with the issues of surveillance and control, it is possible to trace how the power relations



between the two main characters are established in this context, such power relations which are also a reflection of the marriage institution itself. The scenes to be analyzed from now on are chronologically representing the building of Liam's obsessive behavior and his use of the prosthetic memory to monitor and control Ffion, as well as to manipulate other characters.

Besides his behavior with the job appraisal memory, the very first scene between Ffion and Liam already demonstrates Liam's inclination to use the prosthetic memory extensively, and especially regarding his wife's life and behavior. Liam arrives at Ffion's friends' place and the first time he sees her, she is talking to Jonas (Figures 13 and 14, below). Liam is clearly disturbed at the sight of them together, and, in a first moment, we have access only to Liam's reaction to what he is seeing (Figure 13), then, seconds later, it is possible to see Liam watching them (Figure 14), as if the scene itself is foreshadowing what will be repeated many times during the episode. From the narrative, and the character's construction, it is implied that Liam is constantly accessing his prosthetic memory, much more than other characters are shown to be. He accesses it for many and different reasons, to speculate about others or even to guide his social interactions, as stated previously. Although, regarding his relationship with Ffion, this behavior increases, and he becomes obsessed — as Ffion herself have stated in one of their discussions — with the uncovering of her relationship with Jonas.

**Figure 13** - Liam stops as he sees Ffion and Jonas talking.



Source: Netflix

**Figure 14** - Liam keeps observing the two, until Ffion notices his presence.



Source: Netflix.

Liam's obsession, and addiction to the prosthetic memory, is later reaffirmed as he stops for a moment, before reuniting with the others for dinner, in order to *re-do* the memory of the moment he had just lived (Figure 15). From his behavior on the scenes to come, it is possible to know that he spends the whole dinner paying attention to how Ffion responds to Jonas's presence. The access to the memory and the reinforcement of his own obsessive and possessive behavior will influence how he interprets Ffion's behavior at the dinner scene and also how he gradually becomes more controlling, not only over her present-self, but also concerned with what she was, said, and done in the past. Gradually, he is shown not being able to differentiate the two.

One important aspect of this sequence, then, is that it marks Liam's increasing attempt to have control over any situation. From his struggle to control the uncontrollable future regarding his job appraisal to the control over what Ffion was doing when he arrived at her friends' house. Liam *re-does* the memory immediately after the real moment happened and this specific memory will be recalled many times as he insists on observing it for clues, recurring also to the Grain's lip-reading tool, what demonstrates his need of possessing an omnipresent knowledge about Ffion's and Jonas's talk, and also about Ffion's life in general. Liam performs the role of the watcher, and consequently he assumes this metaphorical position of being on a higher position and exerting control over Ffion.

**Figure 15** - Liam immediately *re-does* the memory of Ffion and Jonas talking.

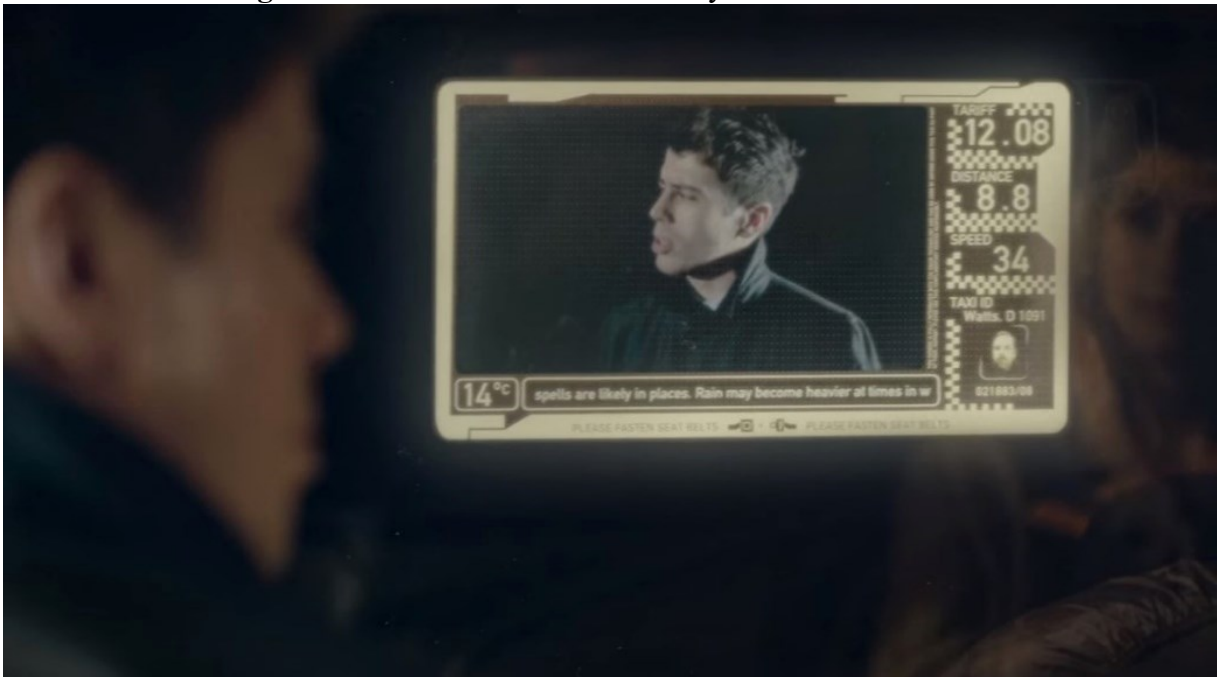


Source: Netflix.

The scene in which both are going home is completely focused on the use of the prosthetic memory. First, Liam streams his appraisal's memory to have Ffion's considerations. Then, when Liam brings Jonas to the discussion, questioning Ffion if they talk to each other with frequency, the prosthetic memory turns out to be used as a proof to settle what they are discussing: who have invited Jonas to come over their house. This is one of the very few scenes in which Ffion is shown using her prosthetic memory to confront Liam, which he does constantly to her. Under the accusation of being the one who invited Jonas to their house, Ffion streams her memory of the moment to show that Liam was the responsible for the invitation.

Their confrontation with the aid of the prosthetic memory is also implicit in the scene's visual elements; the taxi's screen where Ffion's prosthetic memory is being streamed is framed exactly between the two characters (Figure 16), implying, first, that it may be used as a form of appeasement of their issues with its veracity, since, placed between the two, they use it to settle their disagreements, as if only through an outsider's perspective they can reach an agreement. Second, this position of the screen implies the interference of the prosthetic memory in Liam's and Ffion's relationship, as well as it foreshadows how its use will be a problem between them.

**Figure 16** - Ffion streams her memory on the taxi's screen.



Source: Netflix.

In this very panoptic scene, both characters are observing and also being observed in the screen. Besides, there is the symbolism of the screen's reflection; although Ffion is sitting by Liam's side, from this shot's perspective, seen through the screen's mirrored surface, she seems to be in front of him, and Liam seems to be looking at her through the prosthetic memory, which is exactly what he does throughout most part of the episode: watching her through the memories, questioning her behavior, investigating her actions and judging her past. By doing that, Liam again is put in the position of the watcher, the part of the panoptic mechanism that has power over others and judges the other to be in need of constant vigilance.

Regarding the prosthetic memory establishment of surveillance and control, I consider the sequences in the couple's house, the most relevant in order to demonstrate Liam's obsessive behavior. This part of the episode can be divided in two main sequences: the first, at night, right after coming back from Ffion's friends' reunion; and the second, the morning sequence, when Liam confronts Ffion again, after staying all night awake *re-doing* his own memories. In general, these sequences are marked by Liam's expression of his position as a watcher, as an oppressor in this posthuman panopticon. The use of the prosthetic memory is resumed to his endless confabulations about Ffion and Jonas, and the demonstrations of an aggressive behavior in response to both. In a specific moment, in the morning sequence, Ffion asks him a question whose meaning is capable of translating her position in this conflict: *Why am I on trial here?*

The *trial* is established not only by Liam's extensive interrogation, but also by the construction of the scenes, that place Ffion in a position of being doubted and judged. Besides, Ffion is constantly put in contrast with her past-self of the prosthetic memory, while Liam tries to prove she is lying to him.

On the night's sequence, after perceiving Liam's suspiciousness about Jonas, since the first thing he does after arriving home is questioning once again how frequently Ffion talks to him, she admits that he is "*Mr. Marrakesh*", someone she had told Liam that she was briefly involved with in the past. Unsatisfied with the information, Liam keeps asking for more and ends up finding a gap on Ffion's speech about how long they were together. He, then, tries to invalidate her words by using the prosthetic memory to show how, in the past, she said it was lesser time. His actions are reinforced by the disposition of the scenes' sequence. Liam is putting the Ffion from the prosthetic memory above the real Ffion, making her observe herself on the prosthetic memory, to what she responds by repeating many times "*it was years ago*", she has changed, but the prosthetic memory stayed the same (Figure 19). The whole atmosphere of the living room *mise-en-scene* is essential to establish that the power relation happens from Liam over Ffion, translated in this *trial* environment, as it puts Liam as a harmless spectator of Ffion's behavior in the memories (Figures 17 and 18), while she is portrayed as the one who constantly deceived him.

**Figure 17** - Liam as spectator of his own memories



Source: Netflix

**Figure 18** - Ffion demonstrates to be uncomfortable with her exposition, while Liam is entertained with the memory.



Source: Netflix.

**Figure 19** - Ffion is put in contrast with her past-self in the memory.



Source: Netflix.

Liam acts as the watcher, or spectator, someone in a higher position in this panopticon organization, throughout all this night to morning sequence. He is sitting, looking at the screen,

searching for clues, being judgmental about the memories, watching them over and over again. Even some of his lines denounces this position of spectator, as when he *re-does* the scene of their first night together. When Ffion tries to confront him, saying she does not want to watch that specific memory, he says: “*you're about to talk*”, as if he had accessed that memory up to the point of knowing it by heart, with as many precision of details as only a prosthetic memory can give.

In the same sequence there is a superposition of images that, again, demonstrates how past is confronting present. Ffion is heading out of the living room when Liam calls her a *bitch* for not understanding his side of the situation. Liam says “*sometimes, you're a bitch*”, and, hearing that, she stops behind the transparent glass screen, exactly where her past-self was being projected moments earlier (Figure 20), and then she *re-does* Liam’s offense, pointing at her and calling her a bitch, to himself (Figure 21). The playing with time and its linearity here, again puts not only the Ffion from the prosthetic memory through the screen, but also the real Ffion; besides, the super positioning of elements in this scene implies the interaction of past and present. Ffion is the one who is being put in the center of the screen, as it is happening to her in the memories throughout the whole episode, while Liam keeps the position of the spectator even in the memory she projects (Figure 21). She is constantly placed in the role of the observed and controlled, not only by Liam’s attitude but also by the scenes construction.

**Figure 20** - Ffion stops behind the place where the memories of her were being streamed.



Source: Netflix.

**Figure 21** - Ffion streams Liam's offensive behavior.



Source: Netflix.

The *trial* continues as, in the morning sequence, Liam is drunk and even more obsessed with observing the memories. He is shown watching the previous night's memories through all dawn. During the morning, he even asks the babysitter, Gina, to opine about Ffion's behavior toward Jonas, he makes her very embarrassed and Ffion uncomfortable, as he keeps replaying the memory in front of Gina and inducing her to agree with him. Liam accuses Ffion, and, even though Gina avoided giving any answer, he says to Ffion that she had agreed with his perspective that something was strange between her and Jonas. Ffion is once again put in contrast with her images on Liam's memories while he seems not to be satisfied with the information he has, what leads him to finally confront Jonas too. The controlling attitude towards Ffion and psychological intimidation become physical violence, as Liam threatens Jonas's life in exchange for having his memories with Ffion deleted permanently (Figure 22).



**Figure 22** - Liam as spectator of Jonas's memory.



Source: Netflix.

By attacking Jonas, Liam also places himself as the spectator of Jonas's memories, as he demands him to project his memories with Ffion before deleting them. Liam seems to be in need of guaranteeing that his orders would be obeyed, and he would maintain himself in the control of the situation. A reflection of the obsessive behavior toward his own prosthetic memories, Liam's controlling attitudes come out of hand as he obliges others to do as he wishes. Besides, by requesting of Jonas to delete his memories with Ffion, it is also implied Liam's misunderstanding that Ffion's images are his possession to be controlled even in another person's Grain. In addition to that, it demonstrates how Ffion's individuality is constantly being denied by him, due to his possessive thought regarding her images, his constant doubting of her behavior when he is not around.

The panopticon is based on a relationship of power in which two main roles are involved, the watcher, in its privileged position with its coercive power to be used, and the watched, subjugated to the watcher's judgment and in need of being reformed by the latter's omnipresent observation. *TEHOY* mimics this mechanism quite well within the marriage institution, which is a structure that has power as one of its founders, a historically constructed institution based on a relationship of ownership and control. Thus, even in a fictional society, modified by technology, this resemblance between the panopticon and Ffion's and Liam's story is clearly spotted, because it revolves around the very traditional matrimonial institution.

**Figure 23** - Ffion shows the memory with Jonas.



Source: Netflix.

The last act of control over Ffion and her own personal memories is on their confrontation scene, where Liam forces her to stream her memories of the night that she had sex with Jonas. Again, this scene is highlighting Liam's position as spectator, as the power of being the watcher, not only relating to his own memories regarding Ffion, and Jonas's memories, but now to hers. When he demands her to stream the memory, she lies, telling him that she had erased the memory long ago. Liam replies and says that if that was true, there would be a blank space on her Grain's timeline, and he wanted to see that. Ffion tries to keep the memory to herself, to erase it before she had to be exposed, but he takes the Grain control from her. While Liam is sitting in a chair, waiting, in front of their bedroom's screen (Figure 23), he is not only again visually represented in a spectator's place, but he also performs it, as he thinks he has the right to watch his wife's memories and to behave as if she was supposed to meet his expectations and show him everything he demands to see.

The Grain's prosthetic memory shows the uncovering of unknown events in the relationship within Ffion's and Liam's marriage. The use of the memories is presented as a form of being aware of everything and, in Liam's case being invasive and controlling regarding personal and intimate memories. What is sold as a possibility of re-living and remembering pleasant memories becomes an obsession for knowing more about the unknown, and to watch

over other people. The final moments of the episode spark a reflection about this possibility of knowing everything. Liam is shown living between present and past, as he walks through his now empty and dirty house *re-doing* happy memories with Ffion and Jodie in those same places. The episode, then, presents an ambiguous ending: Liam cuts off his own grain and the screen turns black. It is said by Hallam that the unprofessional removal of the Grain may cause damage to the eyesight. Considering this information, either Liam damages his own sight by removing the Grain, or the end is a metaphorical reading of his life without the resource of the prosthetic memories, the end of the pan-optic relationship with life and with his wife.

### 3.2 *ARKANGEL*: MEMORY, SURVEILLANCE AND PARENTAL CONTROL.

*Arkangel* is the second episode to be analyzed under the perspective of the use of the prosthetic memory regarding issues of surveillance and control. The episode's name refers to the parental control system, the Arkangel system, worn by the main character Sara. In this context, the story revolves around a mother-daughter relationship, Marie and Sara, affected by the use of this system, from Sara's childhood to her adolescence. My intention with the analysis of the episode is to explore the idea of the shared prosthetic memory in this family relationship that is mediated by technology, and also to demonstrate how the episode works as a posthuman panopticon, as Marie acquires a controlling position over her daughter due to the possession of the parental unity.

The episode begins in Sara's childhood early years, by presenting the event that contributed for Marie's decision of taking her to have the Arkangel System implanted. Sara fled the neighborhood's playground to follow a cat, while her mother was not watching over her. Marie, then, lives moments of desperation in the search for her daughter, having the police and the help of many neighbors around the place looking for Sara, who was found near a train line, playing with the cat. After this event, Marie, who had already demonstrated hints of being an overly protective mother, becomes even more protective of Sara and decides to try a new technology of parental control that has become famous for its controversies. The prosthetic Sara receives works as a parental security system that — connected to the parental control unity, a screen possessed by her mother — is not only able to transmit and record her visual experience, but also to track her health condition and emotional state, as well as her location. In addition to

that, the Arkangel also gives the parents the power to censor some visual experiences from their child's life, such as violence, blood and sexual content.

**Figure 24** - Marie seeing through Sara's eyes.



Source: Netflix

**Figure 25** - Marie watches as a violent scene is filtered by the system.



Source: Netflix

On images 24 and 25, Sara is at the clinic where she just had the system implanted and Marie is learning how to use the Arkangel. While Sara watches a cartoon on the other side of the room, Marie sees from Sara's perspective through the parental unity screen (Figure 24). Then, the company employee replaces the cartoon for a violent scene in which someone is shot many times and falls back dead (Figure 25), and Marie, just as Sara, sees the screen becoming blurred and the gun shots' noise being muffled by the system's filters (curiously, this violent scene is from another *Black Mirror* episode, *Man Against Fire*, in which the characters also have their visual experiences manipulated by a filter, the Mask). In possession of the parental unity, Marie can see the filtered image without censorship, but she is the one who chooses how Sara will see it.

As Sara grows up with the filters and surrounded by curious children, she starts to be affected by the privation of the knowledge about some experiences. She has some difficulties understanding fights at school and people's wounds, for instance. Sara's discontentment and her attempts to hurt herself up to bleeding leads Marie to search for psychiatric help and to finally decide turning off all the functions of Sara's Arkangel. Thus, she turns off the parental control unity and stops using it to monitor her daughter. The prosthetic inside Sara's body, though, cannot be removed. This detailed information is told by the psychiatrist Sara attends to when she demonstrates a violent and self-destructive behavior. He advises Marie to turn the system off, explaining that it was banned in Europe, and soon would be taken off market in the U.S. too, due to the problems and controversies that were being raised concerning the prosthetics consequences on children's behavior. It is also in this psychiatrist visit that we learn that Sara is unable to recognize violent content in images, which is a very important detail that will be developed throughout the episode and unfold in the violent final scene.

As Sara reaches adolescence, Marie becomes distrustful of her behavior and reactivates the parental control unity without her daughter's knowledge or consent. Marie eases her motherly worries and fears by monitoring Sara as a hidden watcher. At some given point, obsessed by tracking her daughter's location when she was not answering her phone, Marie activates the function of shared visual experience and ends up seeing Sara having sex and, later on, using drugs. While Sara is unaware that her mother reactivated the system, Marie gives her emergency contraception pill mixed with her morning vitamins, because the Arkangel system's health control warned her of Sara's pregnancy condition. The pills cause Sara to feel sick at school and require medical assistance, it is due to this event that she finally discovers that her

mother gave her the emergency pill and that she has been secretly monitoring her. After finding the pill's box in the kitchen's trashcan and the parental control unity hidden under her mother's pillows, Sara watches the recorded memories the system had stored about her life, as well as what her mother had seen about it. Their relationship comes to an end as Sara, taken by anger, violently beats her mother's face with the Arkangel's screen, destroying the parental unity, and leaves home.

Although *Arkangel's* prosthetic memory is very similar to the Grain, analyzed previously in *TEHOY*, which is based on the recording of the user's visual and auditory senses, it differentiates itself from the last because of the implicated family-child relationship that makes one's prosthetic being used by others. As figure 26 below demonstrates, with the control unity Marie not only is able to live-watch Sara's life, but also to navigate through her memories and gather information about the other people who appear on it. Although in *Arkangel* Sara is the only character who is actually living with a prosthetic, she is not able to use it by herself, and, in this episode's panopticon, the Arkangel system establishes clear links of a relationship of surveillance, and consequently control, within the familiar institution. In this specific context, the family being a core of a solo mother and only daughter relationship, interfered and mediated by the use of the parental control technology. The main idea within this chapter, then, is that Sara, being the cyborg character, is censored and submitted to the Arkangel system that gives Marie the omnipresent surveillance over her child, what will develop to a complete and invasive control over Sara's life as she grows to be a teenager.

**Figure 26** - Marie accessing Sara's memory with the parental unity.



Source: Netflix.

The prosthetics presence in Sara's life already reveals her mother's protective motifs. Although my writing here may sometimes put Marie as the antagonist of Sara's freedom and individuality, along with the use of the Arkangel, it is important to comment on a whole society of violence and threat to children and women that is implicitly addressed in the episode's plot. The Arkangel system seems to be appealing to most parents, mainly those who are aware of these threats which permeate society. Being a solo mother, I would say that this is a characteristic that reflects on Marie's super protective behavior throughout the episode. She understands the threats that the world poses and she uses the Arkangel system as a form of guarantee that her daughter would be in lesser danger. Considering these implicit agenda, the episode shows the playground event as the turning point in Marie's life as a mother, where she recurs to something else to provide Sara's safety.

The very first scene of the episode, Sara's birth scene, already gives some hints about Marie's maternal feelings and her tendency of being a protective and worried mother. In the birth moment, the scene shows her as a mother who is disappointed for not being able to have a natural delivery, she even justifies herself for the nurse when she says *"I can't believe I couldn't do it"*. Her concerns, though, are linked with the expectations around what means being a good mother, and beliefs of what a mother is supposed to do or being capable of enduring, such as the natural delivery. In addition to that, she is shown alone since the beginning

of Sara's life, what increases the sense of need for an extra protection when it comes to Sara's safety. Thus, when baby Sara is given to her, the *mise-en-scene* of the shot makes a very clear reference to Marie's future behavior of choosing the Arkangel system (Figure 27). The hospital sheets protective wall separates the room into two parts, on one side, where Marie is holding Sara, it is a very clean, protected part from the childbirth event, where Sara is being cared for and secured; while on the other side of the sheet's wall there is a lot of blood as the doctors finish the C-section procedure. A delivery method that we know, from the dialogue with the nurse, that Marie did not want Sara to go through, so she is immediately separated and protected from that event.

**Figure 27** - Sara's birth scene, the division of the shot into two parts.



Source: Netflix.

The Arkangel system also has its own appealing techniques for the selling of their prosthetic memory. The facility where Sara is taken to have the system implanted shows the company's motto on the waiting room's wall screen. Along with pictures of happy families and joyful children, it is possible to read, as the images change: *Arkangel: safe, secure, peace of mind, protected* (Figure 28). The appeal of the advertisement is not only on the child's safety, but also on selling a sense of tranquility, of peace of mind, as they say, for the parents who decide for it. Moreover, this advertisement only shows images of nuclear families of father, mother and children, what implicates again that, as a solo mother, Marie might feel pressed



about something that is missing on Sara's life and, thus, much more concerned about providing her with a complementary safety. This scene, and the advertisement's construction, might implicitly suggest that in order to equal to that kind of family's structure, Marie needs the extra support of the Arkangel to raise Sara.

**Figure 28** - Arkangel's advertisement.



Source: Netflix.

Even though, in spite of Arkangel's appealing advertisement, the system's credibility is put in question many times throughout the episode, as if a warning was being made about that kind of technology. When Marie gets home from the Arkangel clinic, she explains to her father why she chose to do that, and one of the main reasons seems to be the free trial (Figure 29). Her father, though, takes that excuse with irony and disbelief, which also makes us spectators wonder what the system will cost for them. Marie's speech, though, is reinforced by the shot's *mise-en-scene* and the characterization of this family's social class conditions. They are indeed living in a poorly maintained house, which seems to be placed in a suburban part of the town, thus, the Arkangel might also suggest a way out from another kind of vulnerability. In addition to that, Marie also sees the system as a form of guarantee that Sara would not be hurt in any occasion. She argues that once she had her arm broken because her father did not install a baby gate on the house, to what her father answer: "*and how is the arm now?*". In the light of the new technology, the character of Marie's father is the one who brings to discussion

its actual need and the importance of Sara dealing with some life experiences to grow as an independent individual.

**Figure 29** - The family's social status is demonstrated by the *mise-en-scene*.



Source: Netflix.

Regarding this mother-daughter relationship with the mediation of the prosthetics, one aspect I aim to develop here is the idea of the sharing of the prosthetic memory with the parental control screen. The Arkangel system, then, is marked by the parents influence on the child's life; and, although the child is the one to be carrying the prosthetics, I argue that the Arkangel's prosthetic memory is a shared condition. This shared condition happens exactly because of the use and manipulation by the parents. Sara never gets to see her own memories on the system until she is a teenager, and while she is a child, she is not aware of the system's capability of affecting her life, she is even used to have her mother protecting and monitoring her from distance. Another aspect of the shared system is that it is all based on Marie's choices, from the initial decision of having it implanted, to the decision of reactivating the screen without the consent of Sara, almost an adult daughter then. If taken literally, Sara may be the only cyborg character in the sense that she is the only one whose body is modified with technology, but I argue that Marie can also be read as a cyborg character due to her intrinsic connection with not only Sara's memory, but Sara's whole life details through the mediation of the Arkangel system. Marie is shown to be addicted to using the system, and scenes as the one demonstrated below

(in Figure 30), are common throughout the episode. In this scene Marie is with the parental unity by her side even when Sara is playing on their backyard, within her visual range through the window. Therefore, possessing the parental unity and making it part of her daily life, also makes Marie a cyborg character.

**Figure 30** - The Arkangel is always on Marie's side.



Source: Netflix.

Sara's prosthetic memory is shared and becomes Marie's prosthetic memory too, influencing her life choices, in the light of Landsberg's (2004) idea of the prosthetic memory also being a memory that is not exactly one's own. Since Marie is the one who owns and controls all the information recorded on the parental unity, she has access to every single detail of Sara's life and also to her bodily responses — such information that not even Sara has about her own body — to the point of making a decision for her, as in the case of the emergency contraception pill. The sharing is, at first, naively accepted and understood by the child, but later, as a teenager, Marie accesses these memories and information without Sara's permission. The prosthetic memory, then, becomes more Marie's possession than Sara's, and, without the knowledge that the system was reactivated, the daughter has lesser prosthetic memory than her controlling mother. Besides, since Sara is not able to access her own recorded memories, and because she also had her visual experiences censored during most part of her childhood, while the parental advisory filter was turned on, only Marie could see the events or memories as they

really were. Not to mention Sara's powerless situation of not being able to get rid of the part of the system inside her body, what puts her in the condition of always being under her mother's watching and controlling power as long as the control unity exists.

The sharing of the prosthetic memory can be better approached with the scene in which Sara's grandfather suffers a heart attack. When Sara is watching the blurred image of her grandfather lying on the floor, she is not capable of recognizing that something bad was happening. This scene highlights the consequences of the filter's censorship on the child, as it demonstrates Sara's indifference to her grandfather's pain and her inability to understand it, since the filter also distorted his words asking of help, filtering them as a treat to Sara's peace and safety. The saving of the grandfather only happens because Marie is alerted by the Arkangel that Sara's cortisol level was high, then she is able to see what Sara is seeing without the parental control filter (Figure 31). For Marie, there are numerous benefits in accessing Sara's prosthetic memory, not only to be sure of Sara's safety and whereabouts, but also regarding another loved one safety. This image alludes to the sharing of the prosthetic memory, and the division of who is in the control of it. On one side, on the actual event, there is Sara unable to see her grandfather suffering. She is living the moment but not grasping it in its completeness because of the filters; and, on the other side, on the virtual side of the Arkangel's screen, there is Marie who is able to see the reality of the event better than Sara who is there, but being censored.

**Figure 31** - Marie sees her father in need of medical care through Sara's eyes.



Source: Netflix.

This scene also anticipates that, in the possession of the parental control unity, Marie has the omnipresent eyes to whatever Sara sees, exerting a surveilling role that is transformed into control as she uses the system's information to interfere in other people's lives. The most relevant examples of this surveillance becoming acts of control are the forced emergency contraception pill she gives Sara, and the threatening of Ryan Trick, the boy Sara was going out, with images of them both having sex. The system gives Marie the power of knowing things no one was capable of knowing, like the pregnancy and Sara's private relationship with others. Thus, with the power the Arkangel gives her, she takes off Sara's power and control over her own life and, by doing that, she makes stronger the already existing relationship of power between mother and daughter. In the possession of the prosthetic memory, then, Marie becomes the panoptic symbol in this episode. Drawing back to Foucault and his consideration of the power relations within the panopticon:

The panoptic mechanism is not simply a hinge, a point of exchange between a mechanism of power and a function; it is a way of making power relations functions in a function, and of making a function through these power relations. (FOUCAULT, 1977, p. 106)

The sharing caused by the Arkangel's prosthetic memory reflects on the family institution, especially regarding the mother-daughter relationship. As the episode is divided in two parts, Sara's childhood and Sara's adolescence, the moving from the initial motif of the Arkangel as a surveillance method to its use as a form of exerting control over Sara is perceived in Marie's attitude throughout Sara's growing up. Marie's acts are guided by the knowledge she acquires through something that she saw/shared with the Arkangel's prosthetic memory, which leads her to perform the role of the watcher in this episode's posthuman panopticon.

The beginning of Sara's childhood is marked by her indifference regarding her cyborg condition, she is mostly at home with her mother and grandfather, in an environment in which being watched is her regular condition. It is with the beginning of her social interactions that she is able to perceive that there is a difference between her and the other children. "*It's parental advisory, you're locked out!*" says one of her friends when she is not capable of seeing the video the kids are watching. Sara's early years is heavily marked by the censorship of the Arkangel system and, consequently, by her discovery of what she was deprived of because of the filters. Then, there are two scenes in her mid-childhood ages in which she is kept off dealing with some emotional responses due to her mother's control over the Arkangel.

The Arkangel's parental filter and its censorship marks this first part of the episode and will develop into most of the problems the older Sara has to deal with. Regarding the construction of the scenes, the dog Sara sees everyday as she leaves her house is a constant in the episode, which inform some of the changes on her about the filters. Right after having the Arkangel implanted, Marie enables the filters to avoid the dog's barking at Sara, what usually scared her. From this moment on, Sara sees only the blurred shape of the dog (Figure 32) and becomes unable to hear its barking. Later, on the first time Sara goes to school alone after Marie decides to deactivate the system, she becomes frightened by the real dog's behavior (Figure 33). Scarred by the barking, she walks backwards on the direction of the street and almost got hit by a truck. Is interesting, though, to make a comparison between these two shots and the symbology of the wire fence. In the first image, we see from a younger and censored Sara's perspective, the dog is behind the safety of the fence and also of the filters (Figure 32). Then, when the filters are turned off and Sara encounters the reality that had been denied to her by the Arkangel, she is seen through the other side of the fence (Figure 33). The confrontation with reality demonstrates how Sara was trapped in time, being conditioned to the system's protection she did not get the chance to be used to the dog's behavior, which puts the 10-year-old Sara in the same condition she was years ago, as a younger and frightened child. Then, after years without the filters on, when Sara turns into a teenager, she passes by the same fence in her way to school, calls the dog by its name and give it a treat, which symbolizes her improved relation to the reality. At last, near the end of the episode, the fence is shown with its gate open, a sign of property for sale, and there is no dog in sight, which may be put in parallel with Sara's own fate of fleeing her house.

**Figure 32** - The barking dog seen with the filters activated.



Source: Netflix.

**Figure 33** - Without the filters, an older Sara is once again frightened by the dog.



Source: Netflix.

The next scene that approaches this censorship and alienation of reality is a very remarkable one, it shows when Marie is mourning her father's death and Sara seems to be unaffected by her mother's crying, or even by her grandfather's death at all. In the first shot we can spot Sara, placed far away from her mother, and, as the camera approaches, she is playing

with some dry leaves on the ground (Figure 34). She looks almost bored, and not a single hint of cry can be spotted on her face. When the camera turns and Sara's perspective is shown (Figure 35), we notice that she was incapable of seeing and hearing her mother's suffering as we spectators just saw. Thus, with the aid of the Arkangel's filters Marie not only protects her daughter from dealing with any emotional instability, but she also creates and enlarges the emotional distance between them two. Since Sara is not capable of recognizing the emotions involved in grieving, consequently she cannot play her part in the difficult moments they were supposed to overcome together.

**Figure 34** - Sara stays distant as Marie mourns her father's death.



Source: Netflix.



**Figure 35** - Sara's perspective is shown, with the filters activated.



Source: Netflix.

Later on, there is a scene portraying her discovery of violence and blood. The discovery of her own alienation of reality begins at school, when she is unable to be part of the kids' conversation whenever they would talk about blood related content or about the fights they eventually saw. Knowing she carries the Arkangel, her friend Trick decides to narrate the violent fight videos the children were watching as he noticed Sara was excluded from the children's group for not understanding what was happening. Having her friend's voice and gestures also censored by the Arkangel (Figure 36), Sara continues to be excluded from reality. Sara, then, starts to draw the fights Trick tried to narrate as she could imagine. In one specific scene, she is drawing a man with blood coming out of his head, and even the red of the colored pencil is blurred by the parental control system (Figure 37). Frustrated by her condition, Sara starts to stab her own finger with a sharpened pencil, and as blood comes out of her hand, her own body also becomes blurred out of her visual experience, as it is perceivable on Figure 38.

**Figure 36** - Sara's friend attempt to tell her what they were watching is censored.



Source: Netflix.

**Figure 37** - Sara sees her drawing being filtered for violent content.



Source: Netflix.

**Figure 38** - Sara stabs her finger and her own image is censored.



Source: Netflix.

Having access to Sara's visual experience and also being told when there is any abnormal emotional response in her daughter's behavior, Marie sees as her daughter is self-harming and then decides to search for psychological help, which leads her to deactivate the Arkangel system and its filters, all that she had judged to be the best way of raising Sara. In the continuity of this drawing scene (Figure 39), Sara is shown to be almost absorbed by her act of self-harm, as if she was completely detached from reality — which is, in part, true as she was denied the experience and the learning from painful events. In the cemetery scene, she is not capable of having empathy because of the filter's censorship (this will again be spotted in the final scene in which she beats her mother). Here, she is not capable of recognizing the damage done to herself because of the filter, and also because of her lack of understanding of human's bodily limits, as she never had contact with representations of violence, wounds, or blood related content.

**Figure 39** - Sara stabbing her finger and wiping blood on her face.



Source: Netflix.

Moreover, Marie's attitude of coming out of nowhere, as spotted in the image above, is recurrent throughout the first part of the episode, highlighting her omnipresence in Sara's life. The control Marie exerts over Sara in her childhood is limited to the use of the filters, which, later, cause in Sara a different response to the contents she did not have access to. In the movement from childhood to adolescence, Marie's surveillance and monitoring over her daughter become more invasive and turn into real acts of control, going beyond the use of the Arkangel without Sara's consent and affecting her body and her social life.

The episode moves to its second part as Sara becomes a teenager. At first there is a perceivable change in her relationship with her mother, since the Arkangel system is no longer present between the two, I would say that their relationship becomes more real. In Sara's childhood scenes, the parental unity was always in Marie's side and, most of the times, their interaction was through the system. There is a scene in which Marie is working on her computer, and the Arkangel screen is on her side, Sara is on her room, drawing, and she asks Marie what color to use, Marie barely looks at the screen and answers (Figure 40). The beginning of the second part of the episode, though, highlights the move from a very technologically mediated relationship to a more reality-based relationship. However, Marie turns again to the help of the Arkangel when she feels insecure about Sara's teenager lies and behavior.

**Figure 40** - Marie interacting with Sara through the Arkangel.



Source: Netflix.

The once acknowledged use of the Arkangel becomes an even stronger relationship of surveillance as Marie starts using it without Sara's consent. It is interesting to observe the scene in which Marie decides to reactivate the system (Figure 41). This happens right after she discovers that Sara lied about having a movie night in one of her friend's house. Marie, then, is shown calling to many of Sara's friends' parents in search for her daughter before she gets home and decides to reactivate the system to track Sara's location. Marie appears holding the parental unity from a low camera angle, which gives her the sense of power, of being in a higher position, looking down to the screen, and to the darker part of the stairs below her. As if she was taken of the dark from not knowing about Sara's whereabouts, and not having any control over her daughter's life, to regaining her power of a surveilling parent with the Arkangel system. Besides that, the information on the screen only appears to her, in a first moment, highlighting the scene's resemblance to the panoptic assemblage and its high tower, with the omnipresent gaze of the watcher. From this point on, Marie transforms the surveillance into an extremely controlling situation, one in which she assumes control over Sara's private experiences, as well as her body choices. Entitled with the power of the prosthetic memory, then, Marie attempts to be the invisible power of the surveilling and controlling system.

**Figure 41** - Marie reactivates the Arkangel system.



Source: Netflix.

**Figure 42** - Marie threatens Trick with intimate images of him and Sara.



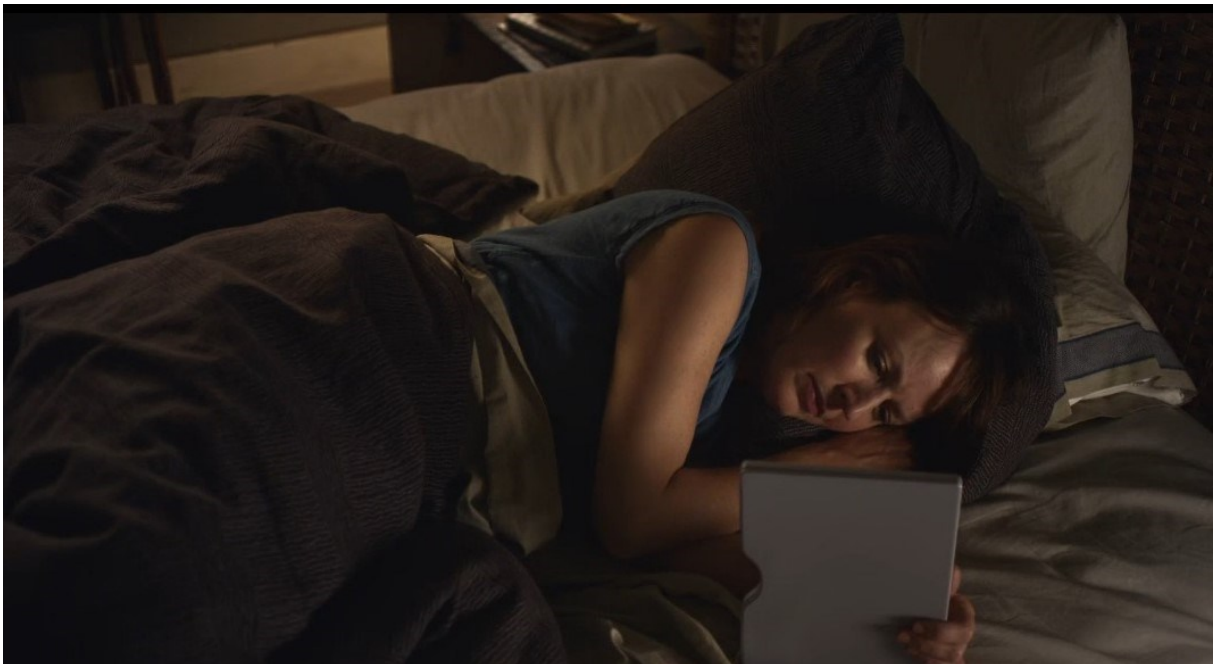
Source: Netflix.

The mother's power acquired with the aid of the system also extends to other characters. Armed with intimate images of Trick and Sara together (Figure 42), taken from the Arkangel memory storage, she threatens the young man and makes him promise to stay away from Sara, who, up to this moment is unaware of her mother's attitude. Marie argues for her

control over Sara, she says to Trick “*whatever she sees, I see, and I am watching you*”, which also highlights the panoptic characteristic of her use of the parental unity.

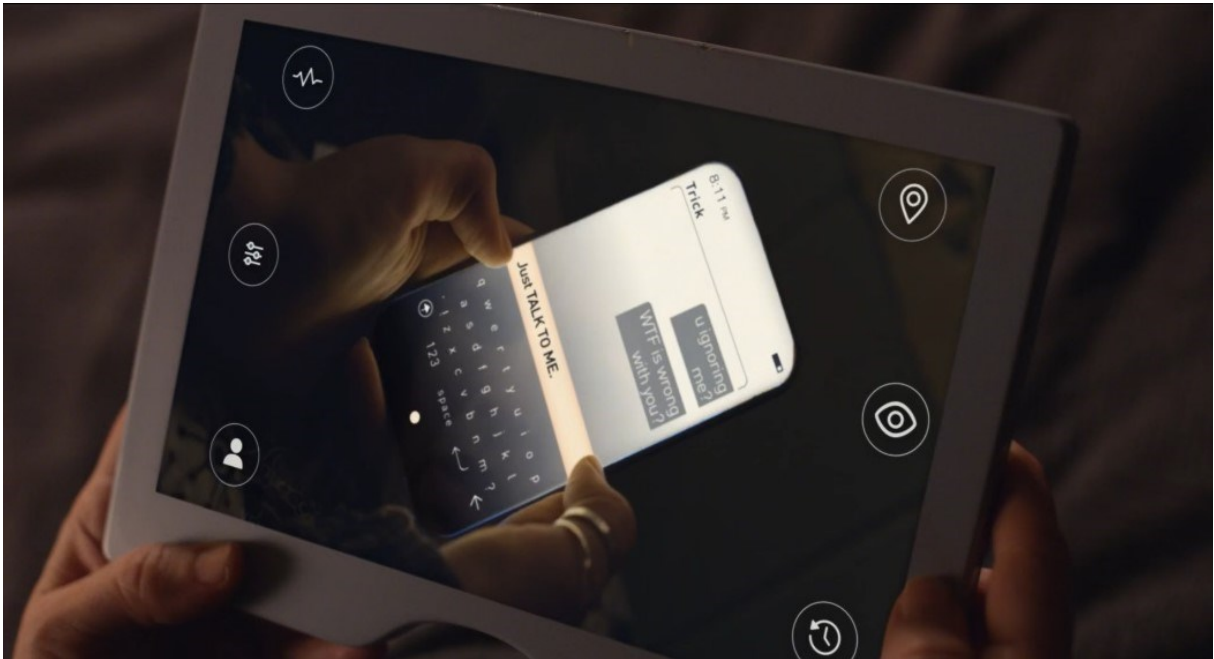
Afterwards, she keeps monitoring both teenagers behavior through the Arkangel, to make sure Trick is obeying her orders. As a consequence, Marie sees her daughter suffering through the screen, not understanding why she is being ignored by Trick, but does nothing. She keeps watching as Sara is feeling sad, but she seems satisfied to see that Trick stopped communicating with Sara. The Arkangel’s parental unity even seems to have become a form of entertainment for Marie, as she is constantly breaking with Sara’s privacy and watching how her relationship with Trick is coming to an end (Figures 43 and 44). Therefore, in possessing of Sara’s memories and information Marie makes choices about her. The most important one being the emergency contraception pill she puts is Sara’s vitamin without her knowledge. However, even before the Arkangel, it is important to notice that the very act of implanting the parental control system was also a hint of Marie’s lack of understanding about Sara’s choice and privacy, since she was a child unable to think by herself, who went through a procedure that resulted in her carrying an implant that cannot be removed. The prosthetic memory not only gave Marie control over Sara at any moment, but also implicated in an irreversible change on Sara’s body, besides the momentarily changes in her behavior due to the filters, and its long-term unknown consequences.

**Figure 43** - Marie is seen constantly watching through Sara’s eyes.



Source: Netflix.

**Figure 44** - Marie watches Sara on the phone.



Source: Netflix.

*Arkangel* is an episode that demonstrates in a very linear way the causes and consequences of the surveillance acts through the prosthetic memory. From the very motif of the use of the Arkangel system, the reassurance of the child's safety through its constant vigilance, to the actual controlling attitudes that the omnipresent surveillance enables Marie to perform over Sara. Sara's first response after seeing her mother with the Arkangel system is to take it from her and try to turn it off. Nervous and unaccustomed with the parental unity system, since it was always in possession of her mother, she accidentally turns the filters on (Figure 45), while Marie keeps saying that she loves her and that everything she did was for Sara's safety and wellbeing.



**Figure 45** - Sara tries to turn the system off, but enables the filters.



Source: Netflix.

As a consequence of these very panoptic characteristics developed in Marie's behavior, there is Sara's response to the Arkangel system; she is constantly censored by the filters to the point of not being able to recognize or perform some emotional responses, which, probably, may have led her to assume a violent behavior. When Marie approaches Sara and tries to take the parental unity from her, Sara reacts and, in an impulsive rage, beats her mother on the face with the Arkangel's screen. With the filters activated, she keeps beating her until the parental unity breaks and the screen shatters, making the filters stop working and making Sara realize what she did (Figure 46). She leaves her mother there, takes a bag of clothes and, at the end of the episode, she is seen on a highway taking a ride to get out of town.

**Figure 46** - Sara beats Marie with the Arkangel's screen.



Source: Netflix.

This ending, besides being violent and surprising, has been anticipated throughout the episode as Sara is constantly shown having struggle to understand violent emotions, and consequently bodily violence itself, due to the extensive use of the filters throughout most of her childhood. Sara breaks this circle of surveillance and control with an attitude that can be said to be nurtured by the Arkangel system. Then, the breaking of the parental unity screen, and the issues involved between the Arkangel technology and the mother-daughter relationship, alludes to *Black Mirror's* opening and its symbology already discussed. A reflection on the use of technology and its consequences.

### 3.3 *CROCODILE*: PROSTHETIC MEMORY AS A NEW FORM OF CRIMINAL TESTIMONY

The third and last episode to be analyzed here is *Crocodile*. At the same time that this episode appears to be the most panoptic of the three, its technology is not the most advanced and the prosthetic memory happens just temporarily, as it will be discussed soon. In *Crocodile*, the narrative follows one of the main characters, Shazia, who is an employee of an insurance company. Shazia's work consists of applying the Recaller, a memory reconstruction technology, to the purposes of her investigation of insurance rights and damage evaluation. The

Recaller is the method she uses to get the victims' and witnesses' testimony about accidents details and also to question about their veracity. This technology is a removable implant connected on the characters' head (Figure 47), which transmits the memories from the mind to its monitor, then, the memory the person is remembering is constructed as images on the Recaller's screen. The tube television shaped technology, transforms what the witness is recalling into video-like images with every sound details that the person is remembering. The two images below, figures 48 and 49, from Shazia's interrogation with one of the characters demonstrate how the Recaller's interface works.

**Figure 47** - The musician with the Recaller's temporary implant.



Source: Netflix.

**Figure 48** - The images begin to form as the man starts to remember the events.



Source: Netflix.

**Figure 49** - The images become clear and Shazia can see and hear what the man is remembering on his mind.



Source: Netflix.

The images from the Recaller can be saved and stored for the investigator's use. Then, while she is investigating the circumstances of the accident involving a musician who was run-over by a driverless pizza-delivery van, she goes after some witnesses of the hit so she can determine the van's speed and claim the pizza company guilty, so her client can get insurance coverage and indemnity. One of the witnesses of the accident happens to be the well-known architecture Mia Nolan, whose past is marked by the obstruction of a crime. In her youth, together with Rob, her boyfriend at the time, she was involved in the killing of a cyclist in a car

crash, when both were under the use of alcohol and drugs. In their situation, to get rid of prison, they disposed of the cyclist's body and his bicycle on a nearby lake instead of reporting the accident to the authorities. Mia, now, has become a successful and respected professional, when Rob comes to meet her in a hotel room in apparent despair. Tormented by guilt, Rob wants to tell the truth about what happened more than a decade ago, because the cyclist's wife appeared on news and is still searching for him. Rob's willingness to break with their secret is what leads Mia to murder him, guided by the fear of having her career and family ruined by the past. However, the moment she is in the hotel room coincides with the accident involving the musician, outside on the hotel's street, thus, the main conflict of *Crocodile* happens when Mia becomes eyewitness of the musician's accident and Shazia wants to check her memories of the event in order to gather more information about the van's speed (Figure 50).

**Figure 50** - Shazia uses the Recaller on Mia.



Source: Netflix.

While Shazia is trying to get Mia's memory of the musician's accident, Mia is so worried about having murdered Rob in the hotel room that Shazia also ends up seeing her memories of the accident involving the cyclist. The use of the Recaller and the invasion of her memories, and consequently the discovery of her unreported murders, leads Mia to keep Shazia captive in an inhospitable place (Figure 51). Mia wants to know if other people knew that Shazia was going to her house to interrogate her, because she is interested in erasing all the traces of herself from Shazia's investigation process. Then, not believing in Shazia's words that she would not tell anyone about what she saw on the Recaller, Mia uses the technology on Shazia

herself, and discovers that the woman had told her husband about going out of town to interrogate Mia Nolan. Mia, then, kills Shazia in cold blood, with a piece of wood she picks at the abandoned barn where she had taken her. After that, she uses Shazia's car GPS to go to her house and kill her husband and infant son, leaving no one to denounce her. Although, by the end of the episode, we discover that there was a guinea pig in the child's bedroom, and the police could identify her as the murderer of the family using the Recaller on the animal (Figure 52).

**Figure 51** - Mia keeps Shazia captive and then kills her.



Source: Netflix.

**Figure 52** - The guinea pig is responsible for Mia's arrest.

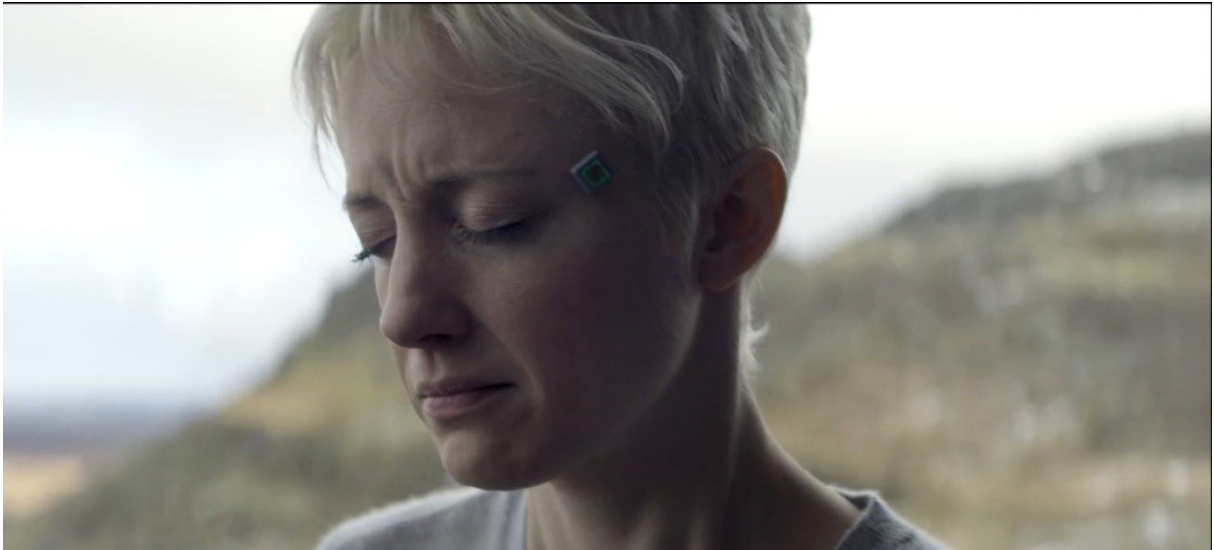


Source: Netflix.

The posthuman panopticon in *Crocodile* is the one who resembles most the panopticon described by Bentham and studied by Foucault, as well as the society of control complemented by Deleuze. I argue that this proximity to the model's organization is due to the fact that the use of the Recaller is mandatory for those who are witnesses of any event or crimes under investigation. The context of the episode being on the use of the prosthetic memory aligned with a social disorder event brings it closer to the original aspect of the panopticon and its establishment of a prison model. Besides, the ones who are in possession of the Recaller are the State, the police, and investigation corporations, such as the insurance company. Differently from *The Entire History of You*, in which the characters also went under some investigation from higher institutions, *Crocodile's* Recaller does not imply any decision of wearing a prosthetic device or not, as the former episode does. The use of the device is temporary, and the citizens are obliged to accept the interference of the Recaller if they were involved in some crime, accident, or witnessed any event in which their memory might serve as a testimony.

By being a temporary use, the characters' memory is manipulated with the device possessed by the State and law institutions, they only need to remember the specific events in their minds, but the ones who possess the prosthetic memory of their remembrance are the ones responsible for the Recaller's application, in this case is Shazia and consequently the insurance company. Thus, the Recaller being incorporated in the law enforcement institutions makes that memories become another form of gathering criminal testimony. This is one of the reasons why Mia fears so much the Recaller's use when Shazia interrogates her, because there are two crimes hidden in her memory that might come to surface when her memory is accessed by the insurance employee (Figure 53). Therefore, the fictional society depicted in *Crocodile* re-creates and re-signifies a total surveillance system based upon the presence of such memory recalling technology.

**Figure 53** - Mia with the temporary use of the memory device.



Source: Netflix.

There are some specific aspects of the episode that contribute to the construction of a panoptic atmosphere around the access of the memories by the Recaller, as well as the necessity for the use of this technology. The main aspects are the geographic isolation of the places and the lack, or negligence, of traditional surveillance systems. The episode is marked by many shots of landscapes, unmonitored highways, remote places and isolated housing areas; places out of the sight of most people. This geographic isolation of the places, then, may be read as something that allows things to happen and remain unknown, such as the car crash Mia and Rob did not report. In figures 54 and 55 below, it is possible to see that the landscape allows them to get rid of the crime, since no one was watching them, and there was little possibility of being caught in the act.



**Figure 54** - The isolation of the road where Mia and Rob killed the cyclist in the car crash.



Source: Netflix.

**Figure 55** - Mia and Rob throwing the man's body and bicycle in a nearby lake.



Source: Netflix.

Mia's later crimes, Rob's and Shazia's murder are also connected to the lack of visibility. The privacy of the hotel room made possible for Mia to kill Rob, besides, the way she gets rid of his body is closely connected to the lack of surveillance and to her own understanding of surveillance. Before leaving the hotel room with his body hidden in the room's service table, she observes the hotel's blueprint and her knowledge of architecture allows her to take him to her car without being caught by any cameras. Then, she takes him to a building site of one of her own housing projects, a place whose lack of surveillance she knows, and

throws his body in a boiler (Figure 56). Regarding Shazia's murder, although Mia lives in a very isolated house, she takes the insurance employee to an even more deserted and abandoned place before killing her, to secure the invisibility of her crimes (Figure 57). Besides, Figure 50 already demonstrated that when Shazia is using the Recaller on Mia, due to her house's isolation, there is nothing impeding her to threaten and kill the woman, the outside landscape of Mia's house reinforces that they were alone with each other. Then, Mia kills to keep her crimes, again, to herself. She not only assumes that she is being observed, since she was literally observed through her memories, but she also assumes that others might observe or notice her if she does not kill everyone connected to the exposure of her memories and criminal secrets.

**Figure 56** - Mia drags Rob's body to one of her housing project's building area.



Source: Netflix.

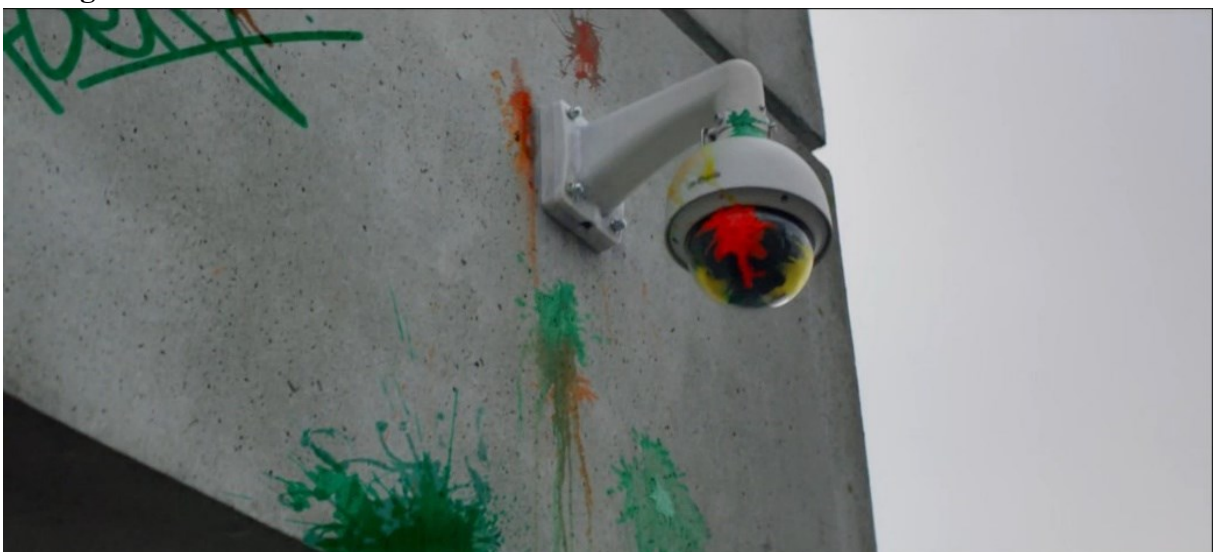
**Figure 57** - Mia on the place she kills Shazia



Source: Netflix.

In addition to the Recaller's power of transforming what the victims and witnesses recall into images to be watched on a screen, one of the aspects that makes possible and even reinforces the parallel with surveillance tools is noticeable through some of the dialogues in the episode, in which the failure of surveillance cameras is highlighted. When Shazia is interrogating the musician, she mentions that she was searching for evidences about the accident, but all the street's cameras were vandalized (Figure 58).

**Figure 58** - Surveillance cameras around the accident area are shown to be vandalized.



Source: Netflix.

Besides that, the driverless van's camera was also malfunctioning, thus it was not capable of providing images of the accident. These hints of failure in the actual cameras and of neglect of the means of surveillance are highlighted throughout the episode, which reinforces how the role of surveillance is being performed by the prosthetic memory acquired with the aid of the Recaller. Therefore, the Recaller is an important aspect of this posthuman panopticon of *Crocodile* because it is shown to have shaped some of this society's functioning. The Recaller's use is much explained in the scene in which Shazia interrogates the musician who had been hit by the van (Figure 59). When she says she has to use the Recaller on him, he asks if it is "*one of those memory dredgers*", and Shazia says they prefer to refer to the technology as "*corroborators*", which already implies the device's role in, somehow replacing the witnesses' personal testimony with the accuracy of the memory watching, whether to confirm or to give support to any statement and findings. Thus, the Recaller not only avoid that people lie to the investigation processes, but mainly offers veracity of the events to the police and law enforcement. It is also through her conversation with the musician that we become aware that the Recaller was once only allowed for police use, but then was extended to the insurance companies and to other investigation processes that rely on the need of a trustable testimony. The use of the Recaller, then, became mandatory for all those who were identified as witness of some event under inspection. By defining the technology as being a corroborator to the cases under inquiry, Shazia also draws attention to the fact that the Recaller institutes a temporary condition of prosthetic memory that serves a truth proof condition.

**Figure 59** - Shazia uses the Recaller on the victim of the accident.



Source: Netflix.

The interrogation with the musician is also a central point in understanding the Recaller's functioning in relation to the memory access and to the formation of the prosthetic memory on its screen. With the aid of some exterior element, the beer to booster the memory, the musician (and all the witnesses) is able to recall the accident's memory; and then, while his natural memory remembers the moment of the accident with the help of the beer's smell to create the street's same atmosphere, since there is a brewery on the hotel's street, the Recaller transforms his remembering in images to be watched by Shazia and to serve as proof for the insurance company. According to Shazia, before she plugs the musician to the Recaller:

“So, this accesses engrams, your memories of what happened. Now, they're subjective. They may not be totally accurate, and they're often emotional, but by collecting a range of recollections from yourself and any witnesses, we can help build a corroborative picture of the whole. [Shazia gives him a bottle of beer to smell, since the accident was near a brewery and the whole place smells like beer] Aroma's a great memory boost, helps anchor you - to where you were.” (*Crocodile*, 24m21s)

The natural memory he is remembering is transformed in prosthetic memory when it becomes available on the Recaller's screen to be used and manipulated according to Shazia's/the insurance company's needs of testimony. What Shazia says to the musician, when explaining how the technology works, can be compared to what Walter Benjamin (2007) had discussed on the definition of voluntary and involuntary memory. Similar to the involuntary memory, Shazia recurs to some external stimulus before applying the Recaller on the victim and witnesses. The emotional response to the external stimulus will bring the specific memory to the surface of that person's mind and, consequently, it will appear on the Recaller. This is exactly what happens to Mia, she tries to hide her memories from Shazia, but she has so many emotional stimulus that end up bringing everything to the fore. When she is connected to the Recaller, Shazia also gives her a beer to smell, to boost her memory of the accident on the hotel street; However, Mia had taken a beer minutes before she killed Rob in her hotel room (Figure 60). The external stimulus, then, not only brought the memory of the musician's accident afloat, but also Rob's murder, and, consequently, probably boosted by the van's crash, her memory also showed Shazia the car crash accident and the cyclist's dead body that she and Rob, also under the effect of alcohol, had run over in their youth. Although Mia tries to deceive the Recaller, one memory brings the other and she is not capable of controlling her mind in face of the sensorial stimulus which connect her two crimes with the musician's accident.

**Figure 60** - Mia heading to the window where she will witness the musician's accident, Rob's dead body and beer on the floor.



Source: Netflix.

Since the Recaller's use is mandatory, people are forced to remember some memory, but the natural memory continues to work the same way discussed by Bergson and Benjamin, thus, under some stimulus and stress, the mind recalls other memories too. I say that the Recaller then is a (in)voluntary memory, because it is voluntary, or even forced, in the sense of choosing to remember or to recreate a specific memory, but all that with the help of the involuntary interference of another stimulus. Mia tries to make her memory completely voluntary; she practices what she will say to Shazia in order to show her only the van's accident moment, but she is unable to have this control over her own memories because of the sensorial stimulus that affect her memory recalling process (Figure 61).

Besides this reading of the involuntary and voluntary aspects of the memory itself, there is also a possible reading of a symbolic meaning of these two concepts. The lack of willingness that revolves around the use of the Recaller is an important aspect of this fictional society's panopticon. Then, the use of the Recaller is closely connected to the idea of an involuntary act. People have no real choice about its use, because it is mandatory and the rejection of its use results in legal consequences. So, most of the prosthetic memory constructed with the aid of this technology is, even if indirectly, an involuntary act of the witnesses because they have no alternative of keeping their memories private. According to Shazia, those who deny the memory access are reported to the police authorities, then, this mandatory access to people's memories not only dialogues with the lack of willingness of showing private

information, but with the impossibility of keeping any secret or private information from the surveilling and controlling institutions. There is no possibility of being invisible in the presence of the Recaller.

**Figure 61** - Mia practicing on the mirror what she will say to Shazia.



Source: Netflix.

The posthuman panopticon in *Crocodile* consists on how this society is transformed into a panoptic society with the aid of the Recaller's prosthetic memory. The panoptic here is marked mainly, by the mandatory access to people's memories, and to the possibility of having access to what any person saw through their memories. Instead of recreating the accident moment with people's spoken testimony, the investigation becomes more accurate when the investigator can "be" in the accident's moment through the different perspectives of its victims and witnesses. The role of surveillance is resignified with the access to the accuracy of the memories, complemented with a citizens' information database; instead of relying and depending on the street cameras existence or the success of its angles and coverage, the Recaller process relies completely on the veracity of eyewitnesses' prosthetic memory. The act of memory accessing through the Recaller, and the prosthetic memory resulting of this process, becomes a tool for surveillance and control of the people living in that society.

**Figure 62** - Shazia sees a woman on the musician's memories.



Source: Netflix.

In *Crocodile's* fictional society, the knowledge about the Recaller's ability over one individual's private memory or secret is able to exert power over their behavior by the fear of visibility. In Foucault's considerations, the action of power itself becomes invisible, although it is what mostly makes the panoptic model function. In this episode, technology is playing the role of giving to some the power of acquiring an omnipresent surveillance over others. Through the visibility of the Recaller, the exposure of the individuals' memories, those who are in possession of the device are capable to trace a web of surveillance and to reach people that otherwise they would not be able to reach. If the Panopticon works by creating a constant observation of the individuals, it can be said that the act of watching the individuals' memories in an attempt to investigate events and to recreate them in the search for evidences is another form of using power to observe the others. The Recaller's surveillance, by tracking clues or other possible witnesses on people's memories, creates a web of surveillance with the prosthetic memory. Chronologically, first Shazia interrogates the victim of the accident, the musician, and, looking through his memories, she identifies a woman who walked past him seconds before the hit (Figure 62).

She uses the image of the woman's face from the Recaller to access a database of facial recognition, which leads her to interrogate the woman in the yellow coat. Though the woman's memories were not helpful, because she only saw the aftermath of the accident, by watching her memory Shazia spotted a flash-light coming from the window of a dentist's office on the street. Then, the first witness's memory takes her to another witness. The dentist is the first



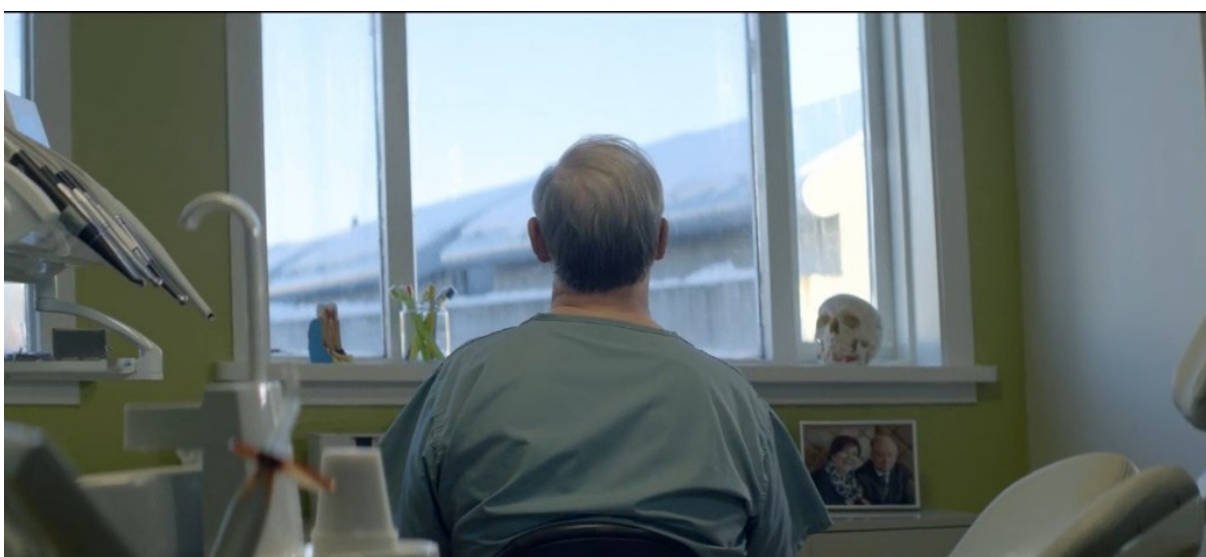
character who is afraid of using the Recaller due to its violation of privacy, he explains that he was doing something embarrassing at the time of the accident, but Shazia guarantees him that unless his memories showed him harming someone, or harming himself, she should not be interested in any of the memories' content (Figures 63 and 64). It turned out that the dentist was taking a photograph of a naked man who was standing in one of the hotel windows, and the dentist's fast glimpse of the accident was not sufficient time for the Recaller to calculate the van's speed.

**Figure 63** - Shazia discusses the Recaller with the dentist.



Source: Netflix.

**Figure 64** - He stays in the same position of the night of the accident while recalling the memories.



Source: Netflix.

Figure 64 also demonstrates the influence of the exterior stimulus for the memory, as the dentist is shown in the same position he was when the accident happened, looking through the window at the hotel's direction. Though not sufficient in regard of the van's speed, the dentist's memory showed Mia on her hotel window looking at the street, as demonstrated below in Figure 65. And, again, with the aid of the facial recognition database, Shazia is capable to reach another witness of the musician's accident, even with a zoomed in low quality image of Mia's face. This database of facial recognition also corroborates to the surveillance system surrounding the Recaller and people's data collection. Finally, Mia's testimony would be the proof needed to establish that the driverless van was strolling the streets in a higher speed than allowed, but her other memories start interfering and popping up on the Recaller. Shazia's reaction makes Mia break this web of surveillance, or else she would be discovered and impaired by the Recaller's exposition of her crimes.

**Figure 65** - The dentist's memory captured Mia looking at the street.



Source: Netflix.

When the memory is transformed in the prosthetic memory created by the Recaller's screen, external and usable by others, it becomes able to be used as form of surveillance and to perform the role of surveillance. Thus, one of my main arguments is that *Crocodile's* prosthetic memory becomes a new form of performing surveillance, substituting the traditional forms of surveillance, such as the cameras. People and their prosthetic memory become themselves the surveillance tools and means. As a result of this materialization of the memories, the eyes of

the witnesses become as trustable as the cameras, when others can have access to what they saw. The mandatory and invasive method of the Recaller, though, conforms to the idea that visibility is crucial for maintaining a panoptic organization. Besides that, in an allusion to the capturing of moments through the images, there is the presence of the dentist who photographs the naked man through the hotel window, but is reluctant to show his own personal information, dwelling on the theme of privacy and surveillance. Thus, the approach of the theme of surveillance also blurs the sense of privacy, as the Recaller is shown to be an invasive method of accessing personal information. As well as the very idea of using cameras to watch over citizens brings out the theme of omnipresent surveillance which was much developed by Michel Foucault in *Discipline and Punish* (1977) and the controlling society discussed by Deleuze (1992).

Nevertheless, at the same time that *Crocodile* resembles a panoptic model of surveillance and control, some of the panoptic characteristics are not yet completely developed here. Considering that the Recaller is shown as some new apparatus for the majority of the people who never had to be under police's custody, as inferred from Shazia's presentation of the technology, people have not yet internalized the power that the Recaller might produce in long term. The Recaller, as demonstrated by Mia's case, is able to drag unwanted, illegal memories. Consequently, the observation of a subjective aspect of someone turns out to be much more powerful than the literal observation of the panopticon. The use of the Recaller, then, in long term might provoke a strong internalized obedience that happens on Foucault's panopticon, because people would know that they are under the possibility of, for any reason or happening, put their memories under the visibility of law enforcement institutions who might discover any crime or illicit action through their subjective response to the Recaller.

**Figure 66** - The panoptic aesthetic in the hotel's outside shot.



Source: Netflix.

In this context, Mia was not living aware of the possibility of her memories being investigated, so, she attempts to erase herself from the panoptic web, but she ends up being caught by the extreme vigilant and controlling society. In contrast with the landscape shots and to the shots that highlight places' isolation, there is one specific shot that highlights Mia's exposure to the Recaller, as she becomes visible through the hotel's window. In this shot above, Figure 66, Mia is on top of Rob's fallen body, asphyxiating him to death. The shot from the outside not only shows how exposed she was, but it also explores a panoptic aesthetics. The hotel rooms and windows are like the cells and Mia is exposed to other's observation. The lighting is also important as it enhances the comparison with the see-through cells of the panopticon. Besides, this idea of seeing-through is also connected to the memory access and to the obligation of citizens to submit their memories to the law enforcement. The awareness of the possibility of being watched by the Recaller might create an unconscious sense of acting in accordance to society's values. The concept of the 'docile bodies' also come at hand to understand these internalization of discipline and the sense of need to behave well. The act of discipline caused by the organization of the panopticon, one that involves surveillance, hierarchization, organization, individualization, creates the bodies that can be easily manipulated. A body is a docile body, in Foucault's considerations when it "may be subjected, used, transformed and improved (1977, p. 136)". While I might argue that Rob was 'docilized' by the system, resulting in his desire to tell the truth, Mia is transformed differently, not

‘docilized’ she attempts to deceive the system and get away with her crimes, but she does that still acting in response to the surveillance system.

**Figure 67** - Mia observes the outside of the hotel.



Source: Netflix.

**Figure 68** - She sees as the accident happens.

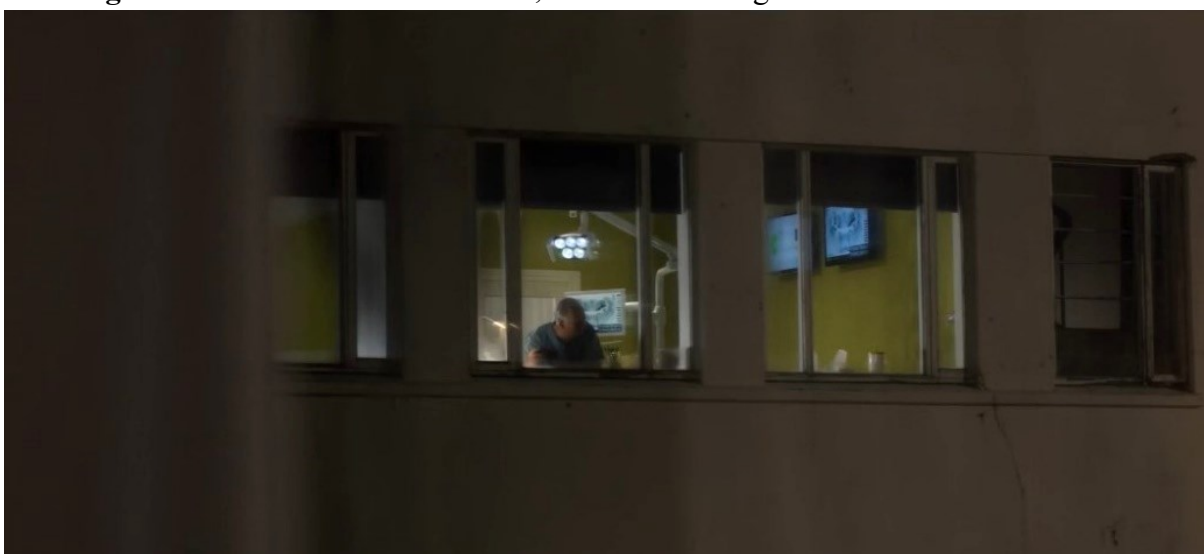


Source: Netflix.

Mia’s scene on the hotel, right after she had killed Rob, anticipated her own exposure and what would happen afterwards with Shazia’s investigation (Figures 67, 68 and 69). Mia stands at the window, somehow thoughtful and affected by what she had just done to Rob, when she watches as the musician is knocked down by the driverless van; then, she looks up at the

dentist observing the street. Finally, she closes all the curtains to cover herself and Rob's dead body lying right behind her. This scene is not only highlight how this posthuman panopticon is based on the web of events and people's prosthetic memory, but also demonstrates the Recaller's intrinsic relation to visibility. Mia only is discovered because the dentist saw her, and the dentist becomes a witness just because his camera's flash-light was part of the yellow-coat woman's memories in this panoptic web of surveillance.

**Figure 69** - Mia looks at the dentist, who is observing the commotion on the street.



Source: Netflix.

Regarding Mia's whole response to the surveilling power of the Recaller's prosthetic memory, she unsuccessfully tries to erase herself from the web of surveillance. Mia demonstrates a completely violent response to the possibility of the police reaching her secrets. The same way she kills Rob because he wanted to report their crime, she responds with a cold blood violence to everything that might compromise her freedom and her reputation. She is a well-succeeded citizen, she has influence in her community, personal and professional. Therefore, she does not abdicate of her own power against the power of law and surveillance, against the Recaller. Instead of reconsidering her position and facing the consequences of the car crash on her youth, she commits more crimes in order to escape the eyes of surveillance. The position Mia has on society, being someone who is successful and powerful in her career also means that she has a lot more to lose in case of being caught, what makes her more aware of the surveillance eyes on her and articulates how to erase herself from the reach of those eyes.

**Figure 70** - Mia kills Shazia's infant son.



Source: Netflix.

The end of the episode is very symbolic, as Mia leaves Shazia's house, having killed her husband with a hammer, and her infant son asphyxiated with a pillow, and goes straight to her own son's school's musical performance. That final scene is where she finally seems to be tormented by what she had just done, and she starts crying as the musical is happening, at the same time that the police is surrounding the school's building in search for her. The contrast between these final scenes of the episode is highlighted due to the children's appearance. On the one hand, there is Mia killing an innocent and defenseless child to protect herself (Figure 70); on the other, there is she and her husband watching the children sing and dance at the school musical; her son being the character who is holding a machine gun (Figure 71). The most interesting though is the choice of this musical, in which children are interpreting mafia characters, singing a song with lyrics such as "*we could have been anything that we wanted to be, and it's not too late to change*", while praising the choice of being "*good guys*" and making the right choices. Ironically, the episode closes with the audience knowing that Mia will be arrested after the children's performance, because all her wrong doings were, indeed, results of wrong decisions of not being the "*good guys*" of society, but, unlike the song, in her situation it is too late to change anything.

**Figure 71** - Mia's son in the musical.



Source: Netflix.

*Crocodile* demonstrates how the access to a prosthetic memory creates another kind of panoptic society. The Recaller stands as the symbol for the panoptic observation in which some have power to watch over others, but, specifically here, the memories are objects of interest to the State and investigation institutions since they serve as a resignified form of testimony, a testimony that relies of the visual representation of memories and their accuracy. Through Mia Nolan's arc, the importance of this form of surveillance is highlighted, as well as its danger, since the very existence of the Recaller is what leads Mia to commit more crimes in an attempt to escape in freedom. The fact that when she kills Shazia and her family, she kills in reaction to surveillance, while trying to escape the surveilling power of the Recaller, indirectly demonstrates that she is still enrolled in the same system, she is influenced by the surveillance system as well. She kills those who has, somehow, a panoptic view about her life – those who had personal and incriminating information about herself. The panoptic power of the Recaller is much stronger, since it enters her mind, while the usual surveillance tools, such as the cameras, are only capable to look at her superficially. Therefore, the whole context of the Recaller's prosthetic memory is what permits it to create a panoptic organization and to transform people's memories in artifices to watch over and to control this fictional society.



#### 4 FINAL REMARKS

The analysis of the episodes provided discussions on the way these three *Black Mirror* narratives can be read as posthuman panopticon, in the light of the construction of the prosthetic memory and its use as an artifice for surveillance. Regarding my analysis of each episode, focusing on the prosthetics' materialization of memory and the way the social relations are affected by the use of the prosthetic memory, I attempted to demonstrate how those fictional societies are related to Michel Foucault's panopticon. Such a parallel happens precisely because the fictional aspect of *Black Mirror* does not prevent the episodes' reading in accordance with symbols of our own society, instead, the proximity of the series fiction to our reality is what makes this comparison possible. The three episodes altogether represent technology in a very panoptic version, creating a surveillance system based on the changes in memory caused by the construction of the prosthetic memory.

The idea of the posthuman panopticon which permeate these episodes and their prosthetics can be read as a step ahead from the traditional panopticon, a kind of panopticon in which the omnipresence is provided by technology in relation to memory access and to personal information of people. All three episodes construct a panoptic relationship between the cyborg characters, which is marked by how the search for omnipresence is increased with the aid of the prosthetic memory, and by how this panoptic element reflects on their social relations. In these final words I once again discuss *Black Mirror's* proximity to our reality as well as its elucidative power of raising questions and worries that dialog with our current ones, with our relationship with technology, and its constant and fast changes. Considering the worries of *Black Mirror's* agenda when creating each episode's science fiction around the memory devices, the three analysis may serve as an observational spot to speculate about how a panoptic model of surveillance develops from the prosthetics.

The speculative power of *Black Mirror* lies on the series proximity to our reality. The fictional scenarios of these three episodes are what makes us intrigued by the narrative, not because they are uncommon, but on the contrary, because they extrapolate some details of our reality in order to foster their discussion. The fact that those fictional societies are, somehow, affecting the way we think about our own is what sheds light on the power of *Black Mirror* speculation about technological issues. Through the series' socially concerned perspectives on our relationship with technology and the representation of different cyborgs and their memory

devices, each episode has played a different and complementary role in raising relevant questions in relation to the use of the prosthetics as a tools for surveillance.

*The Entire History of You* and the Grain have served for the speculation on the extent to how lives and social relations can be affected by a technology which can provide someone with a recorded archive of memory. One of the more significant findings to emerge from the analysis of this first episode is that along with the easy access of one's memories and point of views comes the performance of surveillance, and therefore control, over that person, consequently, the omnipresent power is translated into power relations between the characters. Thus, *The Entire History of You* draws attention to the notion of privacy, and how privacy boundaries gradually become blurred with the use of the Grain, and especially by the institutional surveillance which is constantly happening as it is perceived by the *re-dos* required for Liam on his travels, as well as on his job appraisal experience. Furthermore, the banality of the memory access turns this relationship of watching the prosthetic memory and using it to monitor other people's lives into a very common and encouraged practice. Moreover, the focus of the episode on the marriage institution not only makes explicit the dynamics of the Grain's use consequences, but also raises concerns about how such relationships might be molded and developed in a society with such access of memory and personal information. The power of the Grain's prosthetic memory lies in its capability of changing a whole social order, and replacing it with one established on the fundamentals of such technology. Conforming with Foucault's and Deleuze's assertion about the ways surveillance and control are enacted in society, the changes brought by the Grain happen in many, if not every, part of this posthuman panopticon, and they also reach personal lives, as Ffion's and Liam's relationship has demonstrated. The consequences of the Grain's use are undoubtedly panoptic, due to the excess of information that increases not only the omnipresent relationship with control, but also the power relations between its users, since the panoptic is established with the action of the watcher upon the behavior of the ones who are being watched. In sum, *The Entire History of You* approaches the theme of the prosthetic memory being used as a form of exerting surveillance and control, therefore, for our own reality, the episode's plot also might serve as an alert for our extensive exposition of data, as well as the vulnerability of personal information.

*Arkangel* and the prosthetics of parental control presented in the episode offers a good site for reflecting about the technological aid for kids surveillance and care. But it also develops about the dependence of this prosthetic surveillance and how it is transformed in the acts of

monitoring and controlling the child/teenager at all cost, and in an invasive way. The most relevant finding to emerge from the analysis of the second episode is that the access of personal information by other than the person itself is what enables the promotion of a panoptic and dangerous relationship based on control and ownership from mother to daughter. The sharing of the prosthetic memory between mother and daughter, which I discussed throughout the analysis, is a central point in this posthuman panopticon, as it involves the involuntary and, to some point unaware and naive, participation of the child. Regarding *Black Mirror's* proximity to our reality, the concern with children's vulnerability is extrapolated in *Arkangel* with this parental control device, yet, it translates much of current concern regard children's safety in a technologically mediated world. Then, since the episode is focused on the familiar institution, in the mother-daughter relationship, the concern with security is pretty much aligned with current concerns parents must have when leaving their children exposed to the internet, for instance, or when giving them a smartphone. The online environment, known to be where the parental control is used, is reimaged in this fictional world. If on the internet, parents can banish some contents to not appear on the child's user account, in *Arkangel* these contents can be banned from the child's real-life experiences. Although, in *Arkangel*, the sense of protection and security is transformed in control as the mother possesses the literal power over the child's/teenager's prosthetics, interfering not only in the daughter's life, but also in her body choices. The *Arkangel* system encourages a reflective thinking about how much of surveillance is protective, and how much it can become a panoptic model and an exertion of power and control that might prevent the cyborg children from having some life experiences.

The third episode, *Crocodile*, approaches the consequences of a technology for investigative purposes that is capable of having access to citizens' memories, especially to their real-time process of remembering. Therefore, since the focus of the episode is being given to a criminal plot, it only reinforces how much the Recaller is related to the panoptic model and also how much the aspect of visibility is important for such a fictional social organization to be successful. Thus, the posthuman panopticon in *Crocodile* is constructed around the idea that the prosthetic memory gathered with the aid of the Recaller is playing the role of surveillance in that society, especially reinforced by the findings that the traditional surveillance methods are shown to be neglected or nonexistent in isolated places. The whole plot of giving the power of using the Recaller and, therefore, of possessing the citizens' prosthetic memory to higher institutions such as the State, and institutions connected to the law enforcement, emphasizes the

episode's parallel with Foucault's panopticon model and its relation to the prison system. As it is perceived throughout the analysis, the very relevance of the Recaller's panoptic resemblance is clearly supported by the dependence of *Crocodile*'s society on the gradual replacement of traditional tools for surveillance for the Recaller, as well as the prosthetics' capability of creating the web of surveillance with the information gathered with the accuracy of the prosthetic memory together with citizen's database. *Crocodile* approaches a possible organization of law enforcement in face of a memory gathering technology, thus, the current findings might be informative on possible responses toward such invasive method for investigation. In addition to that, the episode's plot is constantly demonstrating the power of visibility, as much discussed by Foucault. The visibility is, indeed, a trap in this posthuman panopticon, and it is what makes possible the existence of the web of surveillance and the exertion of control over citizens.

The analysis of the three *Black Mirror* episodes undertaken here explore how the three prosthetics create a posthuman panopticon in each one of these fictional societies, as well as how the technologies cause different consequences on cyborg and non-cyborg characters' lives, personal and social. As it is a known characteristic of *Black Mirror* to speculate about the future of technology, these three episodes also play an important role in speculating about how memory (or, in a broader sense, our personal information) might become closely connected to acts of surveillance and control. Although they are products of these episodes' science fiction, the three prosthetics do not seem absurd or unimaginable, they are pretty much understandable by our current relationship with technology and our awareness of surveillance being one of the biggest themes under discussion when it comes to cyberspace and online interaction. Therefore, although based on these fictional scenarios, the observed correlation between prosthetic memory and the panopticon might provide insights on how to deal with the future of extensive data collection and people's online exposition.

As I highlighted throughout this work, *Black Mirror* often deal with social issues interwoven with science fiction, and in these three episodes these issues might be broadly translated as the different ways social relations are affected by the prosthetics' presence. *The Entire History of You* and the couple's conflict which is increased by the Grain, *Arkangel* and the mother-daughter relationship mediated by the Arkangel system, and *Crocodile* with Mia Nolan's conflict with her lies and crimes being discovered by the Recaller and its web of surveillance. All these main conflicts already happen in ordinary social interactions, the presence of these memory prosthetics, then, majorly demonstrates how social interaction and

power relations might be transformed when mediated by technology. That is why the cyborg condition of the characters is so important in the context of analysis of the episodes, because this condition informs the transformations which happen when technology is incorporated to the body and consequently to the social relations, as well as when it interferes in how reality is perceived.

Therefore, the cyborg figure, so much developed in these episodes, is a point of convergence with our current time. Those cyborgs are not much different from who we are now besides their relationship with cutting-edge technology. We are undoubtedly becoming more and more connected and dependent on our technology to perform some activities in a daily basis, and communication is one of them, for instance. The social life has become mediated by technology, and now we possess a whole life 'inside' the online environment. This is why *Black Mirror's* themes and plots may sound so dangerously tangible. The concerns raised by the series are latent and the critical point of this question is whether our cyborg condition is affecting us with such intensity, as Nicholas Carr states in his book *The Shallows: What the Internet is Doing to Our Brains* (2010), as we are inclined to believe so. As Carr questions the implication of internet use and its incorporation in our lives, he argues that "what we're experiencing [with the constant use of technology/internet] is, in a metaphorical sense, a reversal of the early trajectory of civilization: we are evolving from being cultivators of personal knowledge to being hunters and gatherers in the electronic data forest" (CARR, 2010, p. 87). We are, in a sense, newborns in this technological environment, and acknowledging the cyborg condition, then, might be of extreme importance for our learning from this new being/us. The cyborg has shown to be essential for our better understanding of our own relationship with technology. Although some cyborgs might seem too science-fictional to be relatable, others, such as those analyzed, are showing that a cyborg experience is just around the corner as we keep moving toward each time more connected and technologically mediated life. The cyborg, then, poses a symbol for adaptation and, hopefully, there will be space for balance and a healthy relationship with our technologies.

My concern with how much we rely on technology, and on how it constantly changes us, was different when I began this work. I used to see everything with naturalness, but as I moved to think deeper about the way *Black Mirror* presents its own concerns about technology, I realized that some of our responses are not to be taken naturally. This relationship is inevitable, but there is space for learning and to adapt to these new environments, and I believe the series

provides a beginning. Therefore, *Black Mirror* goes beyond the proposition of a “look at what our technology use may cause to us” to a suggestion of a way to deviate from extreme negative outcomes. The learning comes from the critical thinking encouraged by the series’ socially concerned plots and conflicts, as well as its relatability with our current worries. The questions raised by these *Black Mirror* episodes and the series’ overall attempt to understand the cyborg condition may be a key aspect in the comprehension of our own society. The speculative tone of *Black Mirror* episodes opens space to foster a reflective thinking about our relationship and a possible physical hybridism with our electronic devices and the development of such a complex relationship. The speculative scenario seen on *Black Mirror* depicts fictional societies with problems and worries so close and so relatable to ours that we tend to take them as real life, thus, there is where the importance of speculative fiction in general is found. For this reason, we are able to connect and to learn from these kinds of critically constructed narratives. They are of greater importance in sparking new discussions, especially regarding actual latent themes and concerns.

The themes developed throughout the series are already happening to some extent in our reality, and we might not be able to prevent them from happening, instead we might be guided to understand our newly acquired cyborg condition. Especially regarding the themes of surveillance and control, which are only one needle in the haystack when it comes to the areas of life affected by the way technology is being incorporated by people’s lives and bodies. I really worry that we might not be fully understanding the power of our cyborg condition. I keep seeing how much the social life inside the internet affects peoples’ life and well-being, as well as whole groups of people. Notifications and online-life sometimes seem to have the power of being more important than everything, to the point of being harmful, but they are also a new way of communicating. Online environment can be influential and toxic, as well as it can be extremely helpful and entertaining. It might be secured or no-man's land in regard of personal data. It all depends on the way these new environments are used, which is a discussion pertinent to our growing cyborg condition.

*Black Mirror*’s importance, then, lies in the series promotion of varied reflections about human-technology relationships, by demonstrating how it is necessary that we learn about this recent addition to our daily lives and to think and speculate about the long-term consequences. Most episodes, then, speculate on how these consequences might happen, or, even, on how our own technologies might develop in a near future. Technology is a primary

concern in general, although, in the three episodes I dealt with, the issues of memory and the construction of a prosthetic memory, along with the reflection of this new memory on surveillance and control are the focus of discussion throughout my analysis. If we put the episodes' main concepts side by side, posthumanism (human-technology relationship) and the resignification of surveillance methods, they do not infer a much more different reality than our own. Precisely because of the easy relatability of the episodes' plots, *Black Mirror* might provide good content for food for thought regarding the way we use technology.

The necessity of thinking (or rethinking) about this relationship is not in the sense of getting rid of it, but of learning how to coexist in a healthy way. *Black Mirror* does not bring unknown themes into discussion, it is primarily based on what we know. We already face the worries and concerns about how surveillance and technology enter and change our lives. Surveillance is related to data, and the manipulation of online data is, in fact, a current matter of discussion. Current issues go from election's content being biased in big social media companies, to people's data being collected and spread without knowledge or acceptance. A recent Netflix documentary called *The Social Dilemma* (2020) approaches the ongoing changes brought by our extensive use of some social media platforms and how their data collection is becoming a global movement capable of affecting peoples' lifestyle and health. Surveillance, unsurprisingly, is one of the documentary's focuses. *The Social Dilemma* brings former employees of big companies to denounce how their algorithm and data processing are built upon the idea of encouraging addiction to their platform as well as spreading advertisements based on the collection of users' personal data. By constantly monitoring their users, these platforms are able to know them better and, therefore, sell them different and appealing lifestyles (selling, not only in the literal sense of the word. The Snapchat dysmorphia, described by the documentary as how Snapchat/Instagram filters encourage youngsters to go through plastic surgery or aesthetic procedures, is a good example of these platforms influence). The documentary shows that one of our time's biggest concerns is about how much our data is spread on a daily basis, as people are gradually becoming more aware of applications' privacy settings, as well as their terms of acceptance. Discussions on cybersecurity have become more frequent, as security and privacy violations pose as threats to the digital environment. A recent fled from WhatsApp due to a change in their data gathering policy is a reflection on users' worries about their information. Being online, nowadays, and using the most trending app consequently means to agree with the data collection and algorithm surveillance. In this

scenario, *Black Mirror* and its questioning and alerting themes on technology and surveillance are, indeed, mirroring our society's worries.

The panoptic idea of constant monitoring and controlling people's lives is easily relatable with *Black Mirror*'s critique of technology. In fact, *Black Mirror* episodes' critique is not directed to technology itself, but it is a social criticism of how the technology is being received and used by the now cyborg citizens. The panoptic model and the invisible mechanisms of power can be spotted in many social organizations, as Foucault stated, and the dissemination of power and control are everywhere, according to Deleuze. Complementary to these overview on society's organization is Donna Haraway's perspective on the power that arises from the existence of the cyborg. Whereas for Foucault the exertion of power over bodies and the control of populations is translated in the "biopower", Donna Haraway terms this relationship a "techno-biopower" (PRECIADO, 2013, p. 44). Taking into consideration the cyborg being, Haraway determines a revision of Foucault's term to approach these new forms of hybrid lives. Techno-biopower includes and acknowledge the cyborg bodies and all the contemporary world's power and control over "a technoliving and connected whole" (PRECIADO, 2013, p. 44). On further considerations it would be interesting to see how Haraway's term brings another perspective and might as well serve as a continuity for Foucault's overview on how power and control work upon people/cyborgs. Following her fragmented being, bio/life and techno inhabit the same term in a techno-body, as she encourages the comprehension of a new form of power permeating the cyborgs. Haraway's updated view on these mechanisms of power do not set aside Foucault's importance, instead it enables connections to other perspectives of the technologically mediated life.

A possible change in technology may not be the answer for us, because at this point it is already part of our society, but the changes in behavior and in understanding are still and will always be possible. Then, again, the role of *Black Mirror* as a series concerned with alerts to the uses and consequences of technology must be highlighted. Taken together, these discussions on *Black Mirror* and its science fiction have a number of important implications for future reflection on the power carried by the technology we use and what may they have as consequences on our private and public life. This kind of reflection is extremely necessary as the online environment and its products evolve in a very fast pace. Every now and then there comes a new app that goes viral and people start using it without a second thought on security and privacy. Nowadays, our data stored on smartphones goes from personal and intimate



information to our location and credit card numbers, for instance. That is why we must not act without realizing that most of our vulnerability lies in our laptops, mobile phones and clouds storage.

I started this work being someone who took cherish on being a very active user of internet and technology in general. At some point along this writing journey, I started to change my behavior toward the internet, mainly. I started feeling addicted to its escapism offers. I always had problems with that, but they were manageable. Now then, there were times that I felt so dependent to the point of dropping a book to check my phone, of not being able to ignore a notification sound, which were most likely to be nothing important, or not paying attention in a movie because of my phone. Then, I became the person adept of using mobile apps to block my interaction with my smartphone. I was using my technology against itself and in favor of myself. The app *Forest: stay focused, be present* became one of my best friends, it blocks my phone for three hours while it grows a tree on its screen, and the more hours I keep focused, the closer I get from using my virtual coins to plant a tree in a real-life forest. Such an honorable motivation for not touching my phone, but I keep wondering why do we need so much. Of course, the whole context of going through a pandemic in isolation also had affected the way I increased my interaction with technology, and its power over my daily activities. Yet, in spite of that, having to deal with the details of our relationship with technology is something prior to this unfortunate moment. Our cyborg condition requires a constant sense of questioning actions and choices. Thus, the coexistence with different technologies is already established and, unless we keep totally isolated from social life, technologies will undoubtedly make part of our daily lives. But, for now, we are still the ones who decide if they get to be the leading, or play the supporting role. It is still up to us the fostering of a healthy and harmonious coexistence.

## 5 WORKS CITED

### 5.1 PRIMARY SOURCE

*BLACK MIRROR*. Created by Charlie Brooker. Netflix, 2011.

### 5.2 SECONDARY SOURCES

*2001: A SPACE ODYSSEY*. Directed by Stanley Kubrick, MGM, 1968.

ALTMAN, Rick. A Semantic/Syntactic Approach to Film Genre. In: *Film genre reader III*, ed. GRANT, Barry Keith. University of Texas Press, 2003, p. 27-42.

*BANDERSNATCH*. Directed by David Slade, Netflix, 2018.

BENJAMIN, Walter; ZOHAN, Harry; ARENDT, Hannah. *Illuminations: Essays and Reflections*. New York, N.Y: Schocken Books, 2007.

BENTHAM, Jeremy, and BOŽOVIČ, Miran. *The Panopticon Writings*. London, Verso, 1995.

BERGSON, Henri. *Matter and Memory*. New York, Zone Books, 1988.

*BLADE RUNNER*. Directed by Ridley Scott, Warner Bros. Pictures, 1982.

*BLADE RUNNER: 2049*. Directed by Denis Villeneuve, Warner Bros. Pictures, 2017.

BORDWELL, David; THOMPSON, Kristin. *Film Art: an Introduction*. McGraw-Hill, Boston, 2012.

BRAIDOTTI, Rosi. *The Posthuman*. Hoboken NJ, Polity, 2013.

CARR, Nicholas G. *The Shallows: What the Internet Is Doing to Our Brains*. New York: W.W. Norton, 2010.

CLYNES, Manfred E. and KLINE, Nathan S. "Cyborgs and Space", in *Astronautics*, p. 26-30, September, 1960.

DELEUZE, Gilles. *Postscript on the Societies of Control*. In: *October*, Vol. 59. MIT Press, 1992, p. 3-7.

FOUCAULT, Michel. *Discipline And Punish: the Birth of the Prison*. New York, Pantheon Books, 1977.

FOUCAULT, Michel. *The Order of Things: An Archaeology of the Human Sciences*. New York, Pantheon Books, 1971.

FOUCAULT, Michel; HARCOURT, Bernard E. and BURCHELL, Graham. *The Punitive Society: Lectures at the College De France 1972-1973*. Palgrave Macmillan, 2015.

HARAWAY, Donna. "A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century". *The Cybercultures Reader*. New York, Routledge, 2000.

HAYLES, Katherine N. *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics*. Chicago, University of Chicago Press, 1999.

HAYLES, Katherine N. *My Mother Was a Computer: Digital Subjects and Literary Texts*. Chicago, University Of Chicago Press, 2005.

HAYLES, Katherine N. The Life Cycle of Cyborgs: Writing the Posthuman. In: GRAY, Chris H. *The Cyborg Handbook*. New York: Routledge, 1995, p. 321 - 335

HOSKINS, Andrew. The Mediatisation of Memory. In: GARDE-HANSEN, Joanne; HOSKINS, Andrew; READING, Anna (Eds). *Save As...Digital Memories*. Palgrave Macmillan, London, 2009, p. 27-44.

LANDSBERG, Alison. *Prosthetic Memory: The Transformation of American Remembrance in the Age of Mass Culture*. New York, Columbia University Press, 2004.

NAYAR, Pramod K. *Citizenship and Identity in the Age of Surveillance*. Cambridge, Cambridge University Press, 2015.

NAYAR, Pramod K. *Posthumanism*. Cambridge, Polity Press, 2014.

POSTER, Mark. Foucault and Database. In: *The Mode of Information*. Polity Press, 1990, p. 69 – 99.

POWELL, Hellen. *Stop the Clocks! Time and Narrative in Cinema*. London, New York: I.B. Tauris, 2012

PRECIADO, Paul B, and BENDERSON, Bruce. *Testo Junkie: Sex, Drugs, and Biopolitics in the Pharmacopornographic Era*. The Feminist Press, NY, 2013.

SCHOENBERG, Arnold. *Fundamentals of musical composition*. London, Faber, 1967.

*STAR WARS*. Created by George Lucas, Lucasfilm, 1977.

*THE SOCIAL DILEMMA*. Directed by Jeff Orlowski, Netflix, 2020.

*THE TWILIGHT ZONE*. Created by Rod Serling, CBS, 1959.

*TOTAL RECALL*. Directed by Paul Verhoeven, Universal Pictures, 1990.

WELLS, H. G. *The Time Machine*, Bantam, 1895.

WOLFE, Cary. *What Is Posthumanism?* Minneapolis, University of Minnesota Press, 2010.