Memory Restlessness. Technology and Amplified Memories in *Black Mirror* Series

Desasosiegos de la memoria. Tecnología y recuerdo amplificado en la serie *Black Mirror*

Janny Amaya Trujillo*
http://orcid.org/0000-0003-2084-6399
Sistema de Universidad Virtual de la Universidad de Guadalajara, México

ABSTRACT

One of the recurring themes in contemporary audiovisual science fiction has revolved around the relationship between memory and technology. In these types of stories, the social and individual implications of a transhuman memory, that is, technologically improved or augmented, have been approached with relative frequency. This paper analyzes how the relationship between memory and technology has been represented in the successful television fiction series *Black Mirror*. From an approach based on studies on cultural memory and television fiction, and from the analysis of qualitative content. This work examines two chapters that explicitly thematize the relationships between memory and technology: "The Entire History of You" (2011) and "Crocodile" (2017).

The results of the analysis show how in these episodes the irruption of mnemotechnological innovations leads to a decentering around the very concepts of remembering and forgetting, upsetting the limits between registration and recall, between the archive and memory, between personal and public and even between past and present. In these chapters, the social and human reaches of the amplification by technological prostheses of the biological capacities of registration, storage and recovery of memory are delineated critically from two fundamental axes: on the one hand, memory as an object of compulsive consumption, and on the other, memory as an object of social control.

RESUMEN

Una de las temáticas recurrentes en la ciencia ficción audiovisual contemporánea ha girado en torno a las relaciones entre memoria y tecnología. En este tipo de relatos se han abordado con relativa frecuencia las implicaciones sociales e individuales de una memoria transhumana, es decir, tecnológicamente mejorada o aumentada. En este trabajo, se analizan cómo se ha representado la relación entre memoria y tecnología en la exitosa serie de ficción televisiva Black Mirror. *Desde un enfoque basado en los estudios sobre memoria cultural y ficción televisiva, y a partir del análisis de contenido cualitativo, examino específicamente dos capítulos que tematizan de manera explícita las relaciones entre memoria y tecnología: "The Entire History of You" (2011) y "Crocodile" (2017).*

Los resultados del análisis muestran cómo, en estos episodios, la irrupción de innovaciones mnemotecnológicas conlleva a un descentramiento en torno a los conceptos mismos de recordar y olvidar, trastornando los límites entre el registro y el recuerdo, entre el archivo y la memoria, entre lo personal y lo público e incluso, entre pasado y presente. En estos capítulos, los alcances sociales y humanos de la amplificación mediante prótesis tecnológicas de las capacidades biológicas de registro, almacenamiento y recuperación de la memoria se delinean críticamente a partir de dos ejes fundamentales: por una parte, la memoria como objeto de consumo compulsivo, y por otra, la memoria como objeto de control social.

* PhD on Social Sciences by Universidad de Guadalajara [University of Guadalajara] (2013). Bachelor's Degree on Social Communication and Master on Communication Sciences by Universidad de La Habana [University of La Habana], Cuba. Currently she works as professor and researcher at Instituto de Gestión del Conocimiento y Aprendizaje en Ambientes Virtuales [Knowledge management and Virtual Learning Environment Institute] of Sistema Virtual [Virtual System] of Universidad de Guadalajara. She had published papers and articles regarding audiovisual culture and television fiction, as well as history, memory and communication media.

Paakat, Revista de Tecnología y Sociedad, Year 9, no. 16 (2019) ● March-August 2019
eISSN 2007-3607 ● Universidad de Guadalajara

1

Introduction

Fictional stories are products of imagination, through which we engage in a game of possibilities; we dare tell stories about what has been, but above all, about what could be. Fictions always originate from the suspension of the reality of the ordinary world; this operation implies one of its fundamental potentialities: the ability to re-describe the world according to one's own rules and conventions (Ricoeur, 1989, p. 78). Through fiction, societies speak of themselves and attempt to make sense of the topics that are more relevant to them; they explore concerns, imagine scenarios and rehearse alternative solutions or possible consequences.

Science fiction has been a fertile genre to channel fantasies and social disruptions regarding scientific and technological development, as well as the critical questioning of their ethical and political implementations. It is a typically modern genre that has emerged within the framework of cultural and historical formations produced by the science and technology of modernity (Baker, 2014, p. 18).

Science fiction which revolves around the triad reason, science and technology, is based on "a concrete way of thinking, a body of knowledge that derives from this thought and in a produced instrumentality and the reflection of this knowledge" (Telotte, 2002, p. 29). Science fiction stories are "cultural artifacts" (Landsberg, 2004, p. 22) that reveal collective fantasies and fears proper to a specific epoch characterized by the "radical technical transformation of the world" that has led to the modification of "not only sectoral or concrete aspects of human life but to more general and relevant aspects: in the way of thinking, seeing the world, living, organizing political life and legitimizing power" (Esquirol, 2011, p. 12).

Science fiction has operated historically as "an essential way of imagining the horizons of possibility" (Csicsery-Ronay, 2008, p. 1) associated to the inexorable progress of technology. One of its fundamental objectives is to project "futures that are relevant to their own times" (p. 6); i.e., direct desires and anxieties of the present and, from there, outline the possible alternatives of the future.

In post industrial societies, "the fusion between man and technique seems to deepen, and thus, it is more crucial and problematic" (Sibilia, 2005, p. 11). The contemporary techno-scientific project marked by the Faustian impulse of dominance and the total overcoming of nature (p. 51) has inaugurated a new phase that radicalizes and inscribes the mastery of technique in the body and human subjectivities.

Subjectivities and contemporary bodies are affected by the technologies of virtuality and immortality, and by the new ways of understanding and experiencing the space-time boundaries that these technologies inaugurate. At the juncture of post-

Paakat, Revista de Tecnología y Sociedad, Year 9, no. 16 (2019) ● March-August 2019
eISSN 2007-3607 ● Universidad de Guadalajara

2

industrial capitalism […] these mutations are getting very far, to the point of radically redefining the human being, nature and life (Sibilia, 2005, p. 68).

In contrast with the promise and the interest for the future, characteristic of the modern project, our contemporaneity is an epoch "fundamentally interested in itself […]. We are astounded by our time which, in a way, is somewhat sinister and aberrant" (Groys, 2016, pp. 155-156).

In light of the rise of technology, "man reveals himself as the maker of suns and life" and must "respond to the question of whether what he can and does has to do with himself" (Sloterdijk, 2006, p. 4). Science fiction, in a present dominated by technique, assumes, more than ever, the pivotal role of giving meaning to the present and the future, "linking literary, philosophical and techno-scientific imaginations, and subverting cultural boundaries among themselves" (Csicsery-Ronay, 2008, p. 4).

In contemporary science fiction, memory has become a recurrent vortex for interrogating and re-evaluating the traditional descriptions of human subjectivity (Smelik, 2009, p. 52). In light of the development of digital technologies and of other areas such as bioengineering, that interrupts and forces reconsidering the limits between binary formulae as organic-synthetic, personal-collective, real-virtual, the problematization of probable or plausible links between memory and technology makes sense (Matrix, 2009). One of the recurrent concerns in this regard has revolved around the social and individual implications of a trans-human memory, i.e., technologically improved or amplified.

This work analyzes how the relation between memory and technology has been represented in *Black Mirror*, a science fiction television series (Brooker, 2011). The analysis focuses on two chapters that explicitly thematize the relation between memory and technology: "The Entire History of You" (Chapter Three, Season One) and "Crocodile" (Chapter Three, Fourth Season).

Fiction, science fiction and memory mimesis. Theoretical coordinates

Memory, remembrance and forgetfulness are understood as the result of a historical and cultural construction. The concept of "cultures of memory" (Erll, 2012, pp. 45-46) alludes to the dynamic relation of societies with their past and with their own conceptions of memory. While historically there has been different ways in relating with the past through different mnemonic practices, variations have also been produced regarding the way we socially define the concepts of memory and remembrance as well as the concerns generated around them.

Paakat, Revista de Tecnología y Sociedad, Year 9, no. 16 (2019) ● March-August 2019
eISSN 2007-3607 ● Universidad de Guadalajara

3

One of the core dimensions in the constitution of memory cultures is their awareness of temporality, the way they experience their relation with time and the historical transformation (Erll, 2012, p. 46). Contemporary societies –described in terms of supermodernity (Augé, 2000) or ultramodernity (Groys, 2014)– distinguish themselves by the "acceleration of history" (Augé, 2000, p. 34). In them, "the difficulty of thinking of time is due to the superabundance of events" (Augé, 2000, p. 37). In light of the technological progress and the reality of permanent change, ultramodern time contracts, "today we are stuck in the present as it reproduces itself, without heading toward any kind of future" (Groys, 2014, p. 89).

These typical characteristics of the contemporary temporal awareness", together with the arrival of new "memory techniques" (Erll, 2012, p. 47) and the trans-humanist aspirations that render possible intervening, inserting, expanding, modifying or externalizing organic abilities of the human memory, have engendered a "challenge situation" (Sandl in Erll, 2012, p. 47), a crisis in the models of interpretation adopted to comprehend these radical changes. Ours is a culture of remembrance that attempts to give meaning to the accelerated present and construct images of a future impossible to envision.

Therefore, fiction stories can be conceived as mediator devices in our cultural comprehension of remembrance and forgetfulness that may benefit the observation of mnemonic processes and stimulate the reflection upon them. When memory is taken as an object, those stories have the potential to "represent imaginatively acts of remembrance" (Erll & Rigney, 2006, p. 113). They produce a "memory mimesis", they provide visibility to mnemonic practices and processes, they draw attention to them and they facilitate their comprehension (Nungesser, 2009).

Therefore, the stories can contribute to "the cultural knowledge on how individual or group memory works" and, by doing so, they engage in a dialogue with other –scientific, philosophical, journalistic– discourses on the observation of memory (Erll & Rigney, 2006, p. 113) that, directly or indirectly, use as benchmark in their creative descriptions. Hence, science fiction stories can be considered second order descriptions that allow societies to recognize and criticize their own memory culture (Erll, 2012), and fathom the ways in which memory dynamics are reconfigured as of contemporary techno-science.

Science fiction stories construct worlds that, even though they are not empirically verifiable, they are "feasible since they are logically organized" (Novell, 2008, p. 198) and because they resort to "scientific jargon and logic that create the illusion of verifiability and feasibility" (Novell, 2008, p. 198) that justify their existence. They produce estrangement regarding the empirically verifiable reality by introducing one or several nova: innovations, often technical, that constitute the cognitive nucleus of the plot (Suvin, 1972) and in which lies the dislocation between the diegetic world of the story and the extradiegetic world of empirical reality. A more extensive network of

Paakat, Revista de Tecnología y Sociedad, Year 9, no. 16 (2019) ● March-August 2019
eISSN 2007-3607 ● Universidad de Guadalajara

4

innovations is constructed around the dominant novum (Novell, 2008, pp. 202-203) whose implications shape the fictional story. Hence, they operate in a dialectic between the estrangement of the familiar and the familiarization of the estrangement (Novell, 2008, p. 212).

By producing a memory mimesis with the intervention of technology, this type of stories juxtaposes familiar elements in the empirical context of receptors –such as daily registry practices, storage and re-updating of memories–, with the knowledge and scientific advances regarding the functioning of memory at individual or collective level (Nungesser, 2009). Under this perspective, science fiction imagines feasible innovations that dislocate familiar normality and that, by doing so, confront it (Novell, 2008, p. 212).

Given its close relation with the scientific discourse and the formal environments of science, science fiction has also become a "source of information in real and imaginary time". Through it, discussions and trends produced in scientific settings are presented. "In imaginary time, science fiction transforms the path of scientific research in a feasible future" (Gomes-Malauf and de Souza quoted by Alfaro Vargas, 2016, p. 90); thus, anticipating the results that could be achieved.

In this sense, and by extrapolating the field of memory, science fiction operates in both the communication of scientific-technological advances in areas such as neuroscience or bioengineering, and in the anticipation or speculation on their advances for the future. Hence, its critical and reflective potential is projected not only to the extradiegetic contexts from which it is enunciated, but also in regard to a feasible future.

Science fiction works that have addressed the topic of memory have focused, essentially, in representing "the possibilities and impossibilities of digital technologies to register and eliminate individual memories" (Smelik, 2009, p. 52). Their nova are usually technological devices that externalize human memories; prostheses, implants, artifacts that record audiovisual experiences or scientific-technical procedures that facilitate the implantation of false memories, or the edition or elimination of memories. This mnemonic has facilitated the inclusion of the role of memory in the definition of the human and social, as well as the implications of a prosthetic, artificial and improved memory (Landsberg, 2004).

The relations between memory, technology and identity have constituted a frequent interest axis for science fiction since the 1980s –more specifically within the cyberpunk current–. These stories "have explored practices of unloading, implanting, amplifying and remixing synthetic and organic memories, questioning their effects on individual subjects and societies" (Matrix, 2009, p. 61). Over the last decades of the 20th century, the most recurrent concern revolved around the prosthesis metaphor and its relation with identity, the possible implantation of memories and the paradox of remembering unlived experiences (Smelik, 2009, p. 53).

Paakat, Revista de Tecnología y Sociedad, Year 9, no. 16 (2019) ● March-August 2019
eISSN 2007-3607 ● Universidad de Guadalajara

5

At the beginning of the 21st century, the central interest of this type of stories slithered toward the relation between the machine memory –the superior and more accurate one of the computer– and the defective human memory (Smelik, 2009, p. 54). The incompatibility between the organic memory and the synthetic, artificial and technologically constructed memory was a persistent topic (Matrix, 2009, p. 63).

The focal point of concern has shifted in the most recent science fiction works. In light of the rise of digitization and the inscription of the technique in the body and human subjectivity, the fantasies of the implementation, download and registry of memories has led the way to a fantasy of total control over memory through its amplification and reinforcement. "The fantastic utopia focuses now on the total memory habilitated by means of the continuous improvement of memory while the dystopian fantasy focuses on digitized memories that can be manipulated" (Smelik, 2009, p. 54).

Black Mirror: The awkwardness of the future. Methodological strategy

In the specific case of *Black Mirror*, as analyzed by previous authors, the potential "consummation of a Faustian techno-scientific project" is constructed fictionally (Tutiven, Bujanda & Zerega, 2017, p. 83). The series explore the ultimate aspiration of contemporary techno-science; in other words, its drive toward "the mastery and total appropriation of nature, both external and internal of the human body" (Sibilia, 2005, p. 52).

Released in 2011 on British television, *Black Mirror* has rapidly become a fundamental benchmark of contemporary science fiction; many of its critics and viewers rated it as a cult series. In 2015, Netflix acquired the rights of the series and produced two new seasons. Until 2018, the series consisted of four seasons – in total, 19 episodes – and a fifth season has been confirmed and it is scheduled to be released in mid-2019. Furthermore, Bandersnatch, an interactive movie that is also part of the series was released in December 2018.

Black Mirror is an episodic anthology. Each one of its episodes is self-conclusive; they narrate different stories, set in different scenarios with a specific cast and direction. They all share the same thematic approach; they focus on the relationship between human beings and technology. Another common element is the time horizon in which the stories unfold: a perfectly recognizable future, which, at the same time, is perceived as strangely close and even imminent.

Most of the stories that make up this anthology unfold in familiar scenarios that introduce technical gadgets and social practices related to scientific advances and establish a recognizable time lag. Perhaps one of the fundamental mechanisms of the appeal of this series resides in the subtle game between the closeness and the

Paakat, Revista de Tecnología y Sociedad, Year 9, no. 16 (2019) ● March-August 2019
eISSN 2007-3607 ● Universidad de Guadalajara

6

strangeness of space and time. *Black Mirror* thus stands at "the borderline between a dystopia on the verge of occurring and a mirror of what is already among us" (Barraycoa in Álvarez-Villar, 2017, p. 5).

The study of the relations between memory and this series' technology was developed through a methodological strategy based on the analysis of qualitative content of the two episodes previously mentioned: "The Entire History of You" (2011) and "Crocodile" (2017). The analysis of contents consisted in the "set of interpretative procedures of communicative products […] that come from previously registered singular communication processes" (Piñuel, 2002, p. 2).

Its fundamental objective is the "un-covering or revelation of the expression, where the main interest is to enquire on what is hidden, latent, not apparent, potential, unheard (not said) of every message" (Bardin in Piñuel, 2002, p. 4). It is assumed that this interpretation is possible only to the extent that the communicative situation from which it originates is also understood, i.e., its contextual conditions of production and circulation.

The following questions oriented this analysis:

- How are the registry and memory acts represented in the series?
- How are these processes imagined in relation to the techno-science development?
- What are the gadgets or nova being introduced for the registry, storage and retrieval of memories practices?
- What are the social uses that were envisioned for these memory technologies?
- What are the fears, suspicions or ethical dilemmas outlined in this regard?

Moreover, audiovisual discursive resources were taken into account to produce the memory mimesis in the television series.

The process of analysis consisted of several phases. At the beginning, a general review of all the episodes that integrate the series was conducted aiming at distinguishing those episodes in which memory is the pivotal point of the plot. Once these episodes were identified, the specific segments alluding to the relation between memory and techno-science were registered; these were relevant for providing responses to the questions raised.

Nine segments of "The Entire History of You" and seven of "Crocodile" were selected. The results of this analysis were submitted to an interpretation process. In this sense, it should be understood that, in any case, the content analysis always

Paakat, Revista de Tecnología y Sociedad, Year 9, no. 16 (2019) ● March-August 2019
eISSN 2007-3607 ● Universidad de Guadalajara

7

produces "a metatext resulting from the transformation of the original text on which it has been operating" (Piñuel, 2002, p. 7).

"The Entire History of You": the total file and the perpetual past

"The Entire History of You" (2011) is the third and last episode of the first season of *Black Mirror*. This episode describes a society in which the use of a prosthesis that allows the automatic recording of every instant lived has been extended. "The grain" is an optical and neuronal device that amplifies human memory exponentially; an implant that functions as a collector, buffer and reproducer of memories.

This scenario describes the story of the relation of a couple that falls into distrust and jealousy, in light of a likely love triangle. Liam Foxwell, a young father, married to Ffion, begins to suspect that his wife is having an affair with Jonas, an old friend of her maiden years. The story of personal and social achievements of a transhuman memory is being constructed around this topic associated with the private sphere.

The grain is the *novum* that makes this dislocation possible. It is an invisible gadget, a grafting that is part of the human body in this cyborg society. We can only observe it by bringing it into action, i.e., through the practices of its characters and the network of technological artifices enabling the operation. All the technological setting that surrounds the characters is built by devices that seem having been expressly conceived to function out of the grain: controls for the search and retrieval of records, reticules and screens that allow the reproduction of the memories stored, artifacts that facilitate the official scrutiny of the experience.

In many cases, the devices that make up this network of innovations are presented as user-friendly technologies, such as television screens, but they have new meanings and new uses thanks to their interconnection with the grain. This type of apparently recognizable artifacts is combined with more futurist ones such as the Grain Flight Security System, a social control device that allows to obtain personal and comprehensive information of every passenger –biometric data, family nexus– and have access to their homes and recent interactions.

The technological gadgets in "The Entire History of You" are, in all cases, memory technologies. It is an ecosystem conceived to potentiate memory practices to the extreme. They are ubiquitous technologies not only because the grain is inscribed in the body of the characters themselves but because they extend, amplify and foster their functionality, even in the most impersonal places such as the airport concourse or a taxi cabin. Any place is equipped and is conductive to memory.

Paakat, Revista de Tecnología y Sociedad, Year 9, no. 16 (2019) ● March-August 2019
eISSN 2007-3607 ● Universidad de Guadalajara

8

Memory, in this setting, becomes a commodity whose condition of consumption object is framed since one of the initial sequences: Liam gets into a taxi and activates the memory reproduction screen integrated to the vehicle; before visualizing his own memories, an advertising spot plays automatically.

> Live, breathe, smell. Full spectrum memory. An improvement of the Sauce grain can be obtained for less than a daily cup of coffee. Three decades of free storage. The installation procedure embedded with a local anesthesia which will be ready immediately because memory is for living (*Black Mirror*, 2011, "The Entire History of You", min. 2:28-2:46).

The advertising appeal is twofold: it introduces in the narration the disruptive innovation that organizes the plot and illustrates the basic aspects of its operation. Moreover, it establishes the memory status in the society that describes: that which is subject to the rules of trade and the consumption not only of memory technologies but of memory itself.

The grain metaphorically condenses the technological aspiration of the "digitalization of sight as the apex in the perception automation processes" (Virilio in Sibilia, 2005, p. 175). It mechanically records everything the eye sees and, thanks to this, every glance and every moment are preserved as in film mode. Then, the characters have unrestricted access to the complete file of their past experiences. Their film-like memories can be visualized in private, in their own retinas or shared with others through screen projection.

Furthermore, the grain and the network of innovations associated with it, synthesize the "heterotopic promise" of the file overcoming the limits of time and life, as "the machine to transport the present to the future" (Groys, 2014, p. 147). The file gives the subject "the hope to survive to their own contemporaneity and reveal their true self in the future (p. 146). The grain ensures the total documentation of the self that, by being stored as an audiovisual sequence, achieves the aspiration of "life radical museification", i.e., overcoming all the limits of biopower (Groys, 2014, p. 156). The infinite recording of one's own experience has as background the approach of an extreme biopolitical utopia: immortality.

Subjective focalization is a relevant resource to produce memory mimesis in this episode. Liam seeks, rewinds, pauses and amplifies scenes. Through his eyes, we see how the device operates and how every detail can be refocus. In this case, "the dystopia enters through the eyes and we feel how badly things can go because we see how badly things will go if we continue like this" (Garin, 2017). The management of temporality is also used to provide visibility to the memory processes by combining the past recalled (rewinded) and the diegetic present from which this past is being re-viewed.

Paakat, Revista de Tecnología y Sociedad, Year 9, no. 16 (2019) ● March-August 2019
eISSN 2007-3607 ● Universidad de Guadalajara

9

Memories are converted into a form of mediated representation of the experience self-produced by the subjects/characters that, in turn, are their compulsive consumers. Hence, memory is inextricably linked to typically contemporary "self-poetic" (Groys, 2016) and to "self-designed practices" (Groys, 2017). The subject is immersed in the active production of their own image. "The Internet is the place for self-presentation" (Groys, 2017, p. 143), in which individuals construct and mobilize an aestheticized and self-reproduced image of themselves. The "practice of self-documentation" thus becomes "a massive practice and even a massive obsession" (Groys, 2014, p. 97). As a contemporary Narcissus, the characters become their own referents (Groys, 2017) and the self-poetic gesture becomes implicitly "a gesture of commodification of the self" (Groys, 2016, p. 148).

In this "society of transparency" (Han, 2013), the exposure value is absolute, since "things are clad in a value only when they are seen" (Han, 2013, p. 11). This absolutizing of the exposure value is expressed as "the iconic coactions of becoming an image" (p. 14). Even memory, now converted into an image, becomes a commodity. Oblivious memories also become valuable assets, illegally trafficked. Hallam, another character that attends the gathering, does not have any grain since he has been a victim of these traffickers.

Memory consumption constitutes the cornerstone of the organization of social interactions that structure the plot of this episode. Private registries become objects of public consumption: Ffion's friends suggest Liam to project his memories of a work interview so they all can play at assessing his performance; the memories of a youth party are projected during dinner as setting. The radicalized self-exposure allows accessing what, by definition, has proven to be inaccessible to others. Converted into an audiovisual document, memory becomes visible; it is transferred "from the internal mean of the subjective mind to the external mean of digital images" (Smelik, 2009, p. 52).

Repetitions (called "redo" in this episode) are almost equivalent to endless living. The possession of a literal record of the experience causes it to be relived, faithfully and accurately reproduced. Memories are objectified, materialized, and become the characters' most frequent object of audiovisual consumption, substituting fiction, fantasy or even pornography. This is how Jonas's character describes this obsession for redo:

> At the end, I would say things such as: "Honey, go to bed, I'll stay here watching the news a little longer", as he ended up watching hot replays of previous relationships. I'm just saying, there is a beautiful woman upstairs just waiting to have sex with me and I am sitting downstairs, watching the replays of when I was with an attractive chick I seduced somewhere, and I'm masturbating. I'm serious… come on. Come on guys. We all go over replays seeking our greatest success to misbehave now and then, right? (*Black Mirror*, 2011, "The Entire History of You", min. 10:49-11:34).

Paakat, Revista de Tecnología y Sociedad, Year 9, no. 16 (2019) ● March-August 2019
eISSN 2007-3607 ● Universidad de Guadalajara

10

"Redo" refers not so much to the possibility of re-viewing memories, as to remaking them. What has been lived once becomes part of one self –literally– forever. Hence Liam insists not only in breaking the relationship of his wife with Jonas in present time, but eliminate all the files of their past affair. Therefore, the "anxiety caused by the fossilizing effect of memory technologies" is revealed (Smelik, 2009, p. 57). The awareness of transitory nature of the present endorses (self)documentation as a practice that attempts to anticipate and foreshadow the future (Groys, 2016).

Our digital society is "a civilization based on the tracking and collection of the prints of our individual existence, aiming at making everything controlled and reversible" (Groys, 2016, p. 31). However, paradoxically, the possibility of accessing a complete experience file that can be visualized and mobilized endlessly would imply the subjection of the present and the future of individuals to a past that repeats itself circularly, thanks to the constant replay of digital images of the past.

Having or not the grain is presented as a political decision against which a resistance movement has been generated. This context is barely drawn in the dialogue between characters, but it clarifies the ethical and political projections of bearing or not this gadget. Hallam defends his choice in strictly personal terms, but he cannot avoid creating controversies about memory:

Lucy: I think it is an interesting choice not to have a grain.

Paul: It is a brave choice.

Colleen: Sorry, but… I couldn't… you know that half of the organic memories we have are garbage. They're unreliable.

Lucy: Colleen works developing grains.

Colleen: Half of the population can have false memories implanted just by asking them questions during therapy. You can make people remember losing themselves in shopping malls they've never been to, or that a pedophile baby-sitter they never had molested them (*Black Mirror*, 2011, "The Entire History of You", min. 13:20-14:02).

This scene is relevant as it illustrates what seems to construct a value shared by the grain advocates; the lack of reliability and accuracy of organic memories. Human memory is not reliable, precisely because it is not literal; it is ductile, it can be intervened or molded; it stems from an imperfect machinery, and it moves on a terrain close to that of imagination. In light of this imperfection, the assertion is the value of truth being given at registry, which is presumably capable of "establishing a link indexed to a specific reality" (Landsberg, 2004, p. 40). In this society obsessed with audiovisual evidence, human memory, as a re-update of the meaning and

Paakat, Revista de Tecnología y Sociedad, Year 9, no. 16 (2019) ● March-August 2019
eISSN 2007-3607 ● Universidad de Guadalajara

11

reconstruction of the experience, closely associated with the narritivity, is substituted by the entire file of the self-documented audiovisual recording.

Thanks to the grain, the literal recording remains. If erased, its absence is objectified in a timeline gap that constitutes the imprint of what can no longer be remembered. Hence, the past is always accessible and, therefore, always potentially present. It is a perpetual past but, paradoxically, despite the accuracy of the records – and partially, thanks to it–, it is subject to reinterpretation. In this relation between the entire and literally available past and the drastically modified and interrupted present, some critical questions posed in this episode regarding the uses of technologies in our mnemonic practices are being organized: what are the limits of the registry? Will we be able to control its emergence? To what extent are the mediated representations of our own experience transforming what we understand as memory and oblivion?

"Crocodile": the memory transparency

"Crocodile" (2017) is part of the series fourth season. It is a thriller that narrates the story of Mia Nolan, a successful architect willing to do anything to hide an old secret that could affect her current status. Mia was involved in an accident in her youth. She and a friend of hers ran over a cyclist and hid the body to evade justice. Fifteen years later, her friend reappears and beset by his conscience, wants to confess what happened. Mia is against it as it could jeopardize her family stability and her prestige. She murders her accomplice in a hotel room. The room window is open and Mia witnesses the hit-and-run. Shazia Akhand is an insurance policy investigator and she must enquire on the circumstances of the accident Mia witnessed. Her investigation instrument is actually the novum of this story: "the rememberer", a gadget that allows corroborating memories.

"The rememberer" is presented as an isolated innovation; there are no other gadgets associated with it that appear in the plot. It consists of a small but thick portable monitor that reminds us of an old bulb television or an old desktop monitor. Moreover, it is not a brand-new or clean equipment, it is worn out, scratched, marked by frequent use. It is not a luxury item but a work tool.

"The rememberer" has the property of delving into the innermost recesses of the human mind; hence, the characters are incapable of resisting its intrusion. Its operation as a gadget is supported by two fundamental notions. The first is the idea of the subject as active device of observation and surveillance of others in a context in which "the transparency coercion levels man himself until converting him into a functional element of the system" (Han, 2013, p. 5). The second is the idea of the

Paakat, Revista de Tecnología y Sociedad, Year 9, no. 16 (2019) ● March-August 2019
eISSN 2007-3607 ● Universidad de Guadalajara

12

contemporary subject being subjected to radical self-exposure "before the gaze of the unknown and hidden spectator" of the Internet (Groys, 2014, p. 144).

The device is a novelty whose function needs to be explained by Shazia to one of the characters interviewed throughout the investigation:

Shazia: I'll connect you to "the rememberer".

Victim: Is this one of those memory extractors?

Shazia: We prefer "corroborators"…

Victim: It is a police instrument, isn't it?

Shazia: No. From last year. Now, we all use it. Well. Can I?

Victim: Sure… I feel like a specimen.

Shazia: It gives us access to the engrams, your memories of what happened. But they are subjective. They may not be fully accurate or be subject to emotions but by collecting a series of memories, yours as well as those of other witnesses, we can create a complete and corroborated picture (*Black Mirror*, 2011, "Crocodile", min. 23:45-25:00).

To clarify its functioning, scientific terms such as engrams are introduced and a basic explanation is offered regarding some of the physical and biological bases on how the memory functions. This type of resources reinforces the feasibility of "the rememberer" as an artifact that enables accessing the information files consciously or unconsciously.

The most relevant are the uses described in the episode of this technology. First of all, Shazia resorts to the surveillance cameras to corroborate what has happened, but these do not work. In light of the absence of these records, she must appeal to the witnesses to this event. Hence, she returns to the issue of the digitization of the glance, the human eye substitutes the camera and becomes a surveillance device. Each one of the witnesses of the accident leads to other potential witnesses, providing a different vision angle to observe and corroborate what has happened. Among all, they articulate a surveillance network that offers a complete picture of the event.

The "primary and intrinsic surveillance" (Han, 2014b, p. 13) that articulates a society of transparency is metaphored. It is a surveillance that is not exercised by a center, or disciplinary control institutions. Instead, communication networks generate an effect of total surveillance "as if each would watch the other; and this previously to any surveillance and control by secret services. Nowadays, surveillance also takes place without surveillance" (p. 12). In this digital panoptic, surveillance occurs "from

Paakat, Revista de Tecnología y Sociedad, Year 9, no. 16 (2019) ● March-August 2019
eISSN 2007-3607 ● Universidad de Guadalajara

13

all sides, from everywhere; what's more, from each one of them" (Han, 2013, p. 41). Every subject participates to this "total surveillance" network that "degrades the transparent society until converting it into an inhuman control society" (p. 42).

As explained in several dialogues, this technology has been until recently, an exclusively police instrument. However, its use in other fields has recently been legalized. In light of the possibility that embarrassing memories would surface, Shazia clarifies the norms that govern the management of private memories:

> Dentist: To be honest, I'm somewhat embarrassed.
>
> Shazia: Dont' worry. I've seen it all.
>
> Dentist: Do you have to use this thing?
>
> Shazia: Your memories will be inaccessible and they will be stressed privately; unless you would be hurting someone or yourself (*Black Mirror*, 2011, "Crocodile", min. 32:13-32:26).

This law apparently respects the privacy of memories and ensures that these remain inaccessible to others. However, this confidentiality statute implicitly presupposes a strictly personal breach of memories and requires, under certain circumstances, that these be shared with others. Hence, this voids the notion of private, inaccessible and non transferable memories.

Memory is subject to the need of transparency which obliges the de-interiorization and the pursuit of total externality. (Han, 2014b, p. 12). In another scene, before Mia's resistance to collaborate with the investigation, Shazia makes a threat:

> Shazia: I don't want to be rude but, since last year, it is a legal requirement.
>
> Mia: A legal requirement?
>
> Shazia: If you witnessed an incident, yes. I must notify the police if someone refuses to cooperate and when they get involved, everything goes very slowly, then… (*Black Mirror*, 2011, "Crocodile", min. 38:09-38:22).

Mia wants to describe what she saw to Shazia, but her testimony does not suffice: "It is sometimes difficult to express what the eye perceives, but to capture our impression of what you saw is very useful… This is the only thing I'm interested in". (*Black Mirror*, 2011, "Crocodile", min. 39:00-39:25). Memories must be corroborated in images, "the need of transparency makes everything that is not subject to visibility suspicious" (Han, 2013, p. 14).

Paakat, Revista de Tecnología y Sociedad, Year 9, no. 16 (2019) ● March-August 2019
eISSN 2007-3607 ● Universidad de Guadalajara

14

What is being established is the lack of control over one's own memories as well as the coercion of the law on the one's will to remember. The characters do not have any alternative, since under these circumstances the law requires them to submit to the "memory extractor". They are obliged to remember even if they do not remember the facts; they are also obliged to share these memories with others and, lastly, they do not have any control over what they remember.

What is at stake here is the ultimate ambition of "psychopolitics", the characteristic way of postindustrial neolibralism dominance that aspires to "intervene in the psyche" to control it and condition it "at a pre-reflexive level (Han, 2014b, p. 14). This new form is more "efficient than biopower, since it monitors, controls and moves men not from the outside but from within" (Han, 2014a, p. 81).

The lack of control over one's own memories is the fundamental obstacle that Mia faces. As a witness, she is required to remember the scene of the accident, but she cannot dissociate these memories from the images of the crime she committed. Both events are strongly linked. The character does not have any other option than to retrieve the images of one without mixing them involuntarily with the other. The failure to isolate or select one event from the other, betrays her. Just as with other characters when facing the rememberer, Mia becomes transparent: her memories reveal more than what she would like to share with the others.

At this point in the plot, it is clear to Mia that the only thing for her to do is to erase the evidence of her crimes by eliminating Shazia. It is not enough that Shazia guarantees that she will not reveal the secret, she has seen the reproduction of these images and this converts her automatically into a witness not of the facts but of the memories of these facts. She is also at the mercy of everything her gaze has caught.

Mia's criminal escalation does not stop there; she must also murder Shazia's husband because he knows of the investigation. After doing so, she realizes that there is another witness, the baby of both. The child is barely a few months old, but in this context, in which the eye becomes an automatic surveillance device, it also converts them into a potential evidence deposit. Mia murders the child. However, she overlooks a last "witness", a hamster that also registered the scene and which will be the key to incriminating her.

The plot argument in this outcome is brought to an extreme point of the automation of perception. If, a baby or a rodent can be used –according to the logic described in the episode– as witnesses, it is only because their eyes have captured these images and not because they can make sense of them. In this case, "seeing fully matches surveillance" (Han, 2014a, p. 77) and "the rememberer" operates as an image extractor, as a collector of audiovisual evidences of automatic cameras in which living beings are being transformed.

Paakat, Revista de Tecnología y Sociedad, Year 9, no. 16 (2019) ● March-August 2019
eISSN 2007-3607 ● Universidad de Guadalajara

15

In "Crocodile", memory technologies articulate an ubiquitous surveillance network in which the characters themselves are at the mercy of what their eyes have registered voluntarily or involuntarily, consciously or unconsciously. From this perspective, questions concerning our comprehension of memory, its limitations and uses have been constructed. What are the equivalent of registries and memories? What are the differences between a file and a memory? To what point could our cultural obsession for audiovisual evidence bring us? Will a time come when we will no longer be agents of our own memory practices?

Conclusions

The episodes analyzed construct a critical-reflexive discourse regarding the mnemonic practices and technologies in a world obsessed by the registry of everyday life, by the optimization of files and the extension and externalization of human memory. Through them, the relation between memory and technology is constructed around the yearning of overcoming the organic limitations of memory. The social and human scopes of extension through technological prostheses of biological capacities of registry, storage and retrieval of memory are outlined based on two fundamental axes: memory as object of compulsive consumption and memory as object of social control.

Both axes are directly linked to some of the tensions and contradictions in which the contemporary subject is immersed; they must be interpreted in the light of them. As Sloterdijk (2006) claims, "everything that occurs today on the technological front now has consequences for human self-understanding" (p. 10). In the process of accelerated technification, "subjectivity, the self that thinks and feels is fenced" (p. 10); also that of the self that remembers or that needs to reconstruct that which has been learned to define culturally and historically as memory and oblivion.

In the society of transparency, everything –even memory– is subjugated by the imperative of total exteriority; everything aspires to be "undressed and exposed" (Han, 2013, p. 13). This is the "tyranny of visibility" (p. 14) that explains the fascination and fear caused by the dystopia of a memory-image that, given its overexposure has become a commodity (p. 13). At the same time, the coercion of transparency that the digital world gives rise to provokes two opposing aspirations: "we are interested in preserving our privacy, in reducing surveillance […] but, at the same time, we aspire to radical exposure, beyond the limits of social control" (Groys, 2016, p. 150). Hence, the memory-commodity and memory-control axes outlined in *Black Mirror* originate from a common vortex: the concern caused by the radicalized self-exposure of the ultramodern subject.

Paakat, Revista de Tecnología y Sociedad, Year 9, no. 16 (2019) ● March-August 2019
eISSN 2007-3607 ● Universidad de Guadalajara

16

In both episodes, the emergence of mnemo-technological innovations results in de-centring the concepts of remembering and forgetting, that disturbs the boundaries between the registry and the memory, between the file and the memory, between what is personal and what is public, between the accumulation and the narration, and even, between the past and the present. In light of human memory that is assumed as deficient and imperfect, the likely impossibility of oblivion, the subjection to the literal registry of the past and the threat of the loss of control over one's own memories, stand in contrast.

The questions about the series regarding the possibility of having a total file, at the transparency and public availability of private memories, are rooted in the restlessness proper to our present. The daily use of smartphones, computers and network devices that automatically register and store large volumes of digital data produce persistent traces whose path is undetermined; hence, the unexpected emergence of data on the self is always a possibility (Hand, 2016, p. 270).

Memory and oblivion in the conditions of digitization and interconnection of current societies is "less a matter of choice and more of quest" (Hoskins, 2016, p. 16). The probability that digital files that were believed to be erased or lost "emerge to transform what was known or believed that was known on a person, place or event constitutes a spectacular uncertainty for future evolution of memory and history" (Hoskins, 2016, p. 18).

We are "trapped in a digital type of total memory" (Han, 2014b, p. 50), constituted by indifferent points of the present and at the same time by no dead points" (p. 53). Contemporary society "has lost narrativity" and memory is also affected by it (Han, 2013, p. 29).

> Human society is a narration, a story that is necessarily part of oblivion. Digital memory is an addition and accumulation without gaps. The recorded data are countable but cannot be narrated. Saving and retrieving differ substantially from memory, which is a narrative process (Han, 2014b, p. 53).

The strength of science fiction stories to stimulate observation and critical reflection on the conditions, possibilities and challenges of memory in contemporary societies lies in the interposition between the problems and the needs of the present and the projection of probable future scenarios.

REFERENCES

Alfaro Vargas, R. (2016). Marxismo y ciencia ficción. *Revista PRAXIS*, núm. 72, pp. 81-97. Recuperado de: https://doi.org/10.15359/praxis.72.5

Paakat, Revista de Tecnología y Sociedad, Year 9, no. 16 (2019) ● March-August 2019
eISSN 2007-3607 ● Universidad de Guadalajara

17

Álvarez-Villar, B. (2017, diciembre 31). Black Mirror está en la frontera entre una distopía a punto de cumplirse y un espejo de lo que ya sucede. *ABC*. Recuperado de: https://www.abc.es/play/series/noticias/abci-black-mirror-esta-frontera-entre-distopia-punto-cumplirse-y-espejo-sucede-201712310132_noticia.html

Auge, M. (2000). *Los no lugares. Espacios del anonimato*. *Una antropología de la sobremodernidad.* Barcelona: Gedisa. Recuperado de: https://antropologiainacap.files.wordpress.com/2013/04/51458639-auge-marc- los-no-lugares-pdf.pdf

Baker, B. (2014). *Science fiction. A reader's guide to essential criticism*. Londres: Palgrave Macmillan.

Csicsery-Ronay, I. (2008). *The seven beauties of science fiction*. Middletown: W. Press Wesleyan University.

Endemol (productor) y Brooker, C. (director). (2011). *Black Mirror*. Inglaterra: Netflix.

Erll, A. (2012). *Memoria colectiva y culturas del recuerdo*. Bogotá: Universidad de los Andes.

Erll, A. & Rigney, A. (2006). Literature and the production of cultrual memory: Introduction. *European Journal of English Studies*, vol. 10, núm. 2, pp. 111-115. Recuperado de: https://doi.org/10.1080/13825570600753394

Esquirol, J. M. (2011). *Los filósofos contemporáneos y la técnica. De Ortega a Sloterdijk.* Barcelona: Gedisa. Recuperado de: https://cursosluispatinoffyl.files.wordpress.com/2014/01/j-m-esquirol-los-filc3b3sofos-y-la-tc3a9cnica-de-ortega-a-sloterdijk.pdf

Garin, M. (2017). No more memories, la mirada distópica en Black Mirror. En J. Martínez- Lucena y J. Barraycoa (eds.) *Black Mirror. Porvenir y tecnología* (pp. 115-28). Barcelona: Editorial UOC. Recuperado de: http://www.academia.edu/36098262/No_more_memories_la_mirada_distópica_en_Black_Mirror

Groys, B. (2014). *Volverse público. Las transformaciones del arte en el ágora contemporánea*. Buenos Aires: Caja Negra.

Groys, B. (2016). *Arte en flujo. Ensayos sobre la evanescencia del presente*. Buenos Aires: Caja Negra.

Groys, B. (2017). Autodiseño, o narcisismo productivo. *ARQ (Santiago),* núm. 95, pp. 140-145. Recuperado de: https://doi.org/10.4067/S0717-69962017000100140

Han, B. C. (2013). *La sociedad de la transparencia*. Barcelona: Herder.

Paakat, Revista de Tecnología y Sociedad, Year 9, no. 16 (2019) ● March-August 2019
eISSN 2007-3607 ● Universidad de Guadalajara

18

Han, B. C. (2014a). *En el enjambre*. Barcelona: Herder. Recuperado de: https://doi.org/10.3109/03639048409041411

Han, B. C. (2014b). *Psicopolítica*. Barcelona: Herder.

Hand, M. (2016). Persistent traces, potential memories. *Convergence*, vol. 22, núm. 3, pp. 269-286. Recuperado de https://doi.org/10.1177/1354856514546094

Hoskins, A. (2016). Archive Me! Media, memory, uncertainty. En A. Hajek, C. Lohmeier & C. Pentzold (eds.*) Memory in a Mediated World. Remembrance and Reconstruction.* (pp. 1-22). Basingstoke, Hampshire: Pallgrave Macmillan.

Landsberg, A. (2004). *Prosthetic Memory. The transformation of American remembrance in the age of mass culture*. New York: Columbia University Press. Recuperado de: https://doi.org/10.15713/ins.mmj.3

Matrix, S. E. (2009). Rewind, Remix, Rewrite: Digital and Virtual Memory in Cyberpunk Cinema. En J. Garde-Hansen, A. Hoskins & A. Reading (eds.) *Save As... Digital Memories* (pp. 60-80). New York: Palgrave Macmillan.

Novell, N. (2008). *Literatura y cine de ciencia ficción*. Perspectivas teóricas. Barcelona. Recuperado de: http://ru.ffyl.unam.mx/bitstream/handle/10391/487/tesis_lit_cine_ciencia_ficcio n.pdf?sequence=1&isAllowed=y

Nungesser, V.-S. (2009). I forgot to remember (to forget): Personal Memories in *Memento* (2000) and *Eternal Sunshine of the Spotless Mind* (2004). En A. Erll & A. Rigney (eds.) M*ediation, Remediation and the Dynamics of Cultural Memory* (pp. 31-48). New York / Berlin: Walter de Gruyter GmbH & Co.KG.

Piñuel, J. L. (2002). Epistemología, metodología y técnicas del análisis de contenido. *Estudios de Sociolingüística*, vol. 3, núm. 1, pp. 1-42. Recuperado de: https://www.ucm.es/data/cont/docs/268-2013-07-29-Pinuel_Raigada_AnalisisContenido_2002_EstudiosSociolinguisticaUVigo.pdf

Ricoeur, P. (1989). Para una teoría del discurso narrativo. *Semiosis*, núm. 22-23, 19-90. Recuperado de: https://cdigital.uv.mx/handle/123456789/6364

Sibilia, P. (2005). *El hombre postorgánico. Cuerpo, subjetividad y tecnologias digitales*. Buenos Aires: Fondo de Cultura Económica.

Sloterdijk, P. (2006). El hombre operable. Notas sobre el estado ético de la tecnología génica. *Laguna. Revista de Filosofía*, núm. 14, pp. 9-22.

Smelik, A. (2009). The Virtuality of Time: Memory in Science Fiction films. En L. Plate & A. Smelik (eds.) *Technologies of Memory in the Arts* (pp. 52-68). Basingstoke, Hampshire: Palgrave Macmillan.

Paakat, Revista de Tecnología y Sociedad, Year 9, no. 16 (2019) ● March-August 2019
eISSN 2007-3607 ● Universidad de Guadalajara

19

Suvin, D. (1972). On the Poetics of the Science Fiction Genre. *College English*, vol. 34, núm. 3, pp. 372-382. Recuperado de: http://extscifi.weebly.com/uploads/8/9/4/7/8947540/article9.pdf

Telotte, J. P. (2002). *El cine de ciencia ficción.* Madrid: Cambridge University Press.

Tutiven Román, C.; Bujanda, H. & Zerega, M. (2017). The future is broken: lecturas heterotópicas de Black Mirror. *Nómadas*, vol. 47, octubre, pp. 81-95. Recuperado de: http://www.scielo.org.co/pdf/noma/n47/0121-7550-noma-47-00081.pdf

Paakat, Revista de Tecnología y Sociedad, Year 9, no. 16 (2019) ● March-August 2019
eISSN 2007-3607 ● Universidad de Guadalajara

20