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# "What's going to be then, eh?":

## Reading Anthony Burgess' *A Clockwork Orange* (1962) at the posthuman turn

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Année académique 2021-2022
Master en langues et lettres modernes (Anglais/Espagnol), orientation générale, finalité sciences et métiers du livre

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ROGE2 MS/SL
Année académique 2021-2022

# “What’s going to be then, eh?”:

## Reading Anthony Burgess’ *A Clockwork Orange* (1962) at the posthuman turn

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**Acknowledgements**

Whether it is a science book, a novel, a comic book, or something else, it seems fair to say that we have all read a book at least on one occasion in our lives that has had a strong impact on us. This was the case for me when I was a twelve-year-old teenager, who opened Anthony Burgess' novel *A Clockwork Orange* without knowing that this book would change my life. It was, in fact, from that moment that this young girl opened up to a passion that would never leave her: literature. In other words, this book allowed me to find the path I wanted to follow in my life and therefore to be where I am today. It is then logical that I decided to pay homage to this novel that has followed me through all the stages of my life up until now through my Master's thesis, the last trace that a student leaves behind when he/she finishes his/her studies.

That is the reason why I would like to warmly thank my supervisor, Véronique Bragard, for having supported me in this choice, which was far from easy, and for having given me the necessary help to carry out this research that is so dear to my heart.

I would also like to sincerely thank my friend, Heavenly Vranckx, for her help, proofreading, advice and support throughout these two years of hard work.

I am undoubtedly forgetting many people who, in the course of a discussion or a brief exchange of words, have let slip opinions, advice, names of authors, titles of books, ideas, words that have gently but surely awakened ideas in me and enriched my research and my arguments, sometimes even without knowing it. To all these people, I say a huge thank you.

To all the members of my family, especially my parents, who supported me and put up with my long monologues about my research and especially my doubts, as well as the long hours spent working instead of being by their side, I thank you and love you with all my heart.

If I had one last thank you left, it is to Anthony Burgess, now deceased, that I would like to address it. I thank you warmly and sincerely for having awakened in this young girl of 12 a passion which will never leave her and which today enlivens her life with a thousand of adventures read and re-read.

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# Introduction

> "As novels are about the ways in which human beings behave, they tend to imply a judgement of behaviour, which means that the novel is what the symphony or painting or sculpture is not – namely, a form steeped in morality"
>
> Anthony Burgess (quoted in Davis and Womack, 2002:19)

In the 1960's, nearly the entire world was still marked by certain tragic events such as the two World Wars, the rise of totalitarian regimes, the emergence of nuclear weapons and the Cold War, which was still in its infancy. In this post-war context, where human technology and violence were particularly perceived as threats, many authors put their pens to work in order to warn the citizens of this grieving world. It is indeed often "in the periods of great pessimism which are epitomized by wars, power abuse, tyranny and any other happenings" (J. Pospíšil, 2016:7) that a particular inspiration seems to awaken in the hearts of authors seeking to warn against tragic or frightening events. Aldous Huxley's *Brave New World* (1932) or George Orwell's *1984* (1948), for example, were part of this particular kind of so-called pessimistic but inspiring context. The two novels display dystopian societies in which the happiness and entire lives of citizens are manipulated either with the help of drugs (*Brave New World*) or with the help of a totalitarian government that does not hesitate to use torture to make recalcitrant citizens adhere (*1984*). These two novels are therefore perfect examples of a writing process motivated by a post-war context that has seen the sometimes dire consequences of misused violence and technology. These consequences – for instance the loss of freedom or free will of individuals, emerging from the association between violence, technology, torture and drugs – lead in both books to a revolt of the protagonists who can no longer bear to live in worlds where everything is imposed on them. As a result, Orwell and Huxley seemed to be saying: Citizens, you are now warned!

Influenced by the Huxley's and Orwell's universes, Anthony Burgess' *A Clockwork Orange* (1962) tells the story of a 15-year-old delinquent, Alex, who is passionate about classical music and violence in a futuristic London where fear dominates the streets. Burgess' novel, like the works mentioned above, has a particular interest in violence, drugs and technology. Combined in a torture-like aversive therapy (brainwashing) organised by the government in order to reduce the crime rate, the three elements are treated in Burgess' novel

in ways similar to *1984* and *Brave New World*. In all three dystopias, drugs are used by authoritarian governments to transform and control individuals, including through torture in *1984* and *A Clockwork Orange*. Revolt is also a common thread linking the three authors as each of these novels, through for example love or suicide, depict characters becoming aware of the total lack of control over their own lives and wanting to react against it.

Hence, despite all these similarities and the fact that it is also a product of a post-war period, *A Clockwork Orange* is particularly different from the literary landscape of its time because of Burgess' emphasis on the consequences of certain human behaviours. This characteristic gives the novel an ethical turn that was unprecedented in the 1960s. Common themes in the literary landscape of the time, such as violence, technology and their relationship to human beings, are treated in a way from which many ethical questions stimulate in the reader's mind: can violence be a solution to violence itself? Is it ethical to use violence to reduce crime? Is it possible to make human beings perfect even if it means making them artificial and preventing them from being violent? Can human technology be used on its creator without consequences and without ethical reflection? All these questions, revealing a profoundly maieutic tendency in Anthony Burgess' style, make the novel visionary in the eyes of a 21st century reader who can fully appreciate the scope of these ethical reflections in the time of the posthuman turn. The thread of this work is then clearly expressed in this observation: the following research will aim to demonstrate, through a new reading of the novel, to what extent Anthony Burgess' *A Clockwork Orange* addresses contemporary issues related to the posthuman turn. This will be the objective of the three different sections of this study.

The first section will contextualise Burgess' novel and highlight the context of the novel's publication and its reception. This part will situate the work in a British post-war context where the violence deployed by the protagonist has been particularly pointed out for being gratuitous and shocking. In a search for explanations for this aggressiveness, multiple interpretations have been assigned to Burgess' book. Whether they are biographical and draw on the sometimes tragic events experienced by the author, sociological and find their origin in the post-war context characterising the novel's publication in 1962, or literary and answer to the dystopian turn that has, among other things, characterised part of the literature of the 20th century, these interpretations all highlight many of the key themes of *A Clockwork Orange* such as violence, technology and human nature.

The second section offers an overview of the concept of posthuman(ism) that will bring particular significance to the elements outlined in the previous section in a very specific context:

that of the posthuman turn characterising the end of the 20th and the beginning of the 21st century. As the concept of posthumanism is a discourse considering the possibility of a post-human world, it represents a specific approach to the relationship between human beings and their technology. As a new ethical branch, entitled biological or critical posthumanism, has recently emerged, the concepts of posthuman and posthumanism will provide a new perspective that can shed light on certain elements of Anthony Burgess' novel, such as the ethical reflections that are raised about the use of technology for the purpose of human improvement.

This new perspective will particularly feed the third part of this research, which will be devoted to the analysis of certain central themes of *A Clockwork Orange* that will be highlighted as echoing the posthuman concept previously put forward. The questioning of human nature, the discussion of the artificiality of the human being and ethical considerations will be accentuated as embodying elements at the source of posthumanist reflections in Burgess' novel. To what extent do these reflections echo the visionary character of Burgess and his novel, and above all to what extent do they allow *A Clockwork Orange* to stand out within a post-war literary landscape are among the questions that will be discussed in the following research. These discussions will then demonstrate how, almost 60 years after the novel's publication, the issues dealt with by Burgess can be the object of a brand new reading of *A Clockwork Orange* at the posthuman turn.

## Contextualisation of Anthony Burgess' *A Clockwork Orange* (1962)

### *A Clockwork Orange: the story of a young delinquent*

In order to understand and analyse a novel, it is first necessary to understand the narrative, its main lines and its key events. Divided into three parts, each containing seven chapters, Burgess' novel tells the story of a 15-year-old criminal named Alex. Accompanied in his illicit adventures by the members of his gang named Pete, Georgie and Dim, Alex commits the worst atrocities and brings terror to the streets of a futuristic London.

In fact, in the first part of the novel, Alex, who is also the narrator of his own story, and his friends prepare for a night of crime. Taking drugs, beating up a teacher and a drunken old man in the street, stealing a car, destroying a shop and beating up the customers... are nothing compared to the gruesome climax of their night: breaking into a writer's house, destroying his manuscript (titled *A Clockwork Orange*) and raping his wife in front of him. Not satisfied with this savage night, Alex continues the next day with the rape of two 13-year-old girls as an appetiser for the second night of crime that awaits him. Unfortunately, the second night does not go as planned. Obnoxious to his parents and his own friends whom he leads around, Alex finds himself betrayed by his gang members who drive him into a trap. While beating up an old woman after breaking into her house, Alex ends up being arrested by the police who have in the meantime been warned by Pete, Georgie and Dim, tired of being Alex's pawns. But Alex's situation only gets worse when he learns that, without necessarily meaning to, he has just killed the old lady he had beaten up.

The second part of the novel is a turning point in Alex's story as he is sentenced to 14 years of imprisonment for his misdeeds. Far from regretting his actions, Alex manages to befriend with the prison chaplain who tells him about a method called 'Reclamation Treatment', which allows prisoners who volunteer to get out of prison more quickly. Eager to get out of prison to seek revenge and continue his life of crime, Alex volunteers without knowing exactly what this treatment, also known as 'Ludovico's technique', consists of. The nightmare then begins for Alex: already deprived of his freedom, he is subjected to an intensive brainwashing involving the forced viewing of ultra-violent films with the help of a device that prevents his eyelids from closing, which, together with drug intake, sickens Alex. Normally enthusiastic about human violence, Alex's body is rapidly programmed to suffer in the presence of any form of aggressiveness, whether in thought, word or deed. Once Ludovico's method turned out to be successful, the government finally decides to release Alex and make an example of him. The

solution to get rid of crime and to depopulate the prisons seems to have been found just before the next elections.

In the third part of the novel, Alex, released, finds himself facing a society where the violence he can no longer stand erupts everywhere. Unable to defend himself against his former victims who take advantage of the situation to take revenge, young Alex is lost. He finds himself in the position of the victim and only manages to get help from one of his former victims, the writer whose wife Alex raped. The woman now dead without having fully recovered, her broken husband soon realises that the young man he wants to protect is in fact his wife's murderer. Seeking revenge, he uses Alex as an instrument to try to avenge his wife but also to overthrow the government that tortures people to make them good. Furthermore discovering that he is now sick whenever he listens to classical music, which was used as background music in the films during Ludovico's technique, Alex cannot bear to be deprived of his only passion outside of crime and tries to commit suicide. Failing his attempt, Alex wakes up in hospital where he realises that his suicide attempt has made him a martyr in everybody's eyes. Left with no choice in the face of the media storm and the public anger provoked by Alex's now moving story, the government is forced to undo what it had done, and gives back his free will to Alex even if it means giving him the opportunity to become a criminal again. This is what Alex does at first. However, the last chapter of the book brings a surprising finale: meeting one of his former 'droogs' [friends], Pete, now employed and at the point of becoming a father, Alex starts to think about his future. What if he too could find a wife and start a family? Now 18, this becomes young Alex's goal: no more violence!

### *Reception of the novel*

If an adjective had to be chosen to describe Anthony Burgess' novel, it would undoubtedly be controversial. Indeed, *A Clockwork Orange*, although recognised by many critics as a monument of English literature, is a novel that can be qualified with an extensive range of the worst adjectives (violent, shocking, inhuman, traumatic...). With its unprecedented violence that can both shock and awe, the novel has been the source of much uproar in both the United States and England, the two main countries where it has been a best-selling novel. This controversy was especially brought to the forefront when, in 1971, *A Clockwork Orange* was adapted into film "written, directed and produced in England by Stanley Kubrick, one of

Hollywood's most critically acclaimed and commercially successful filmmakers at that time" (Krämer, 2011:xi). This movie, although acknowledged by many as Kubrick's masterpiece, revived the heated debate already provoked in part by the release of the book, which resulted in the novel and the film being "the target of vigorous attacks by some film reviewers and by other commentators" (Krämer, 2011:xi). Banned in some parts of England, the film was even accused, like the novel, of stimulating violence in viewers and of being "responsible for copycat crimes" (Krämer, 2011:xi), including rapes, robberies and assaults that took place in the 1960s and 1970s.

However, the controversy was not only about the violence in the novel, but also about the conflict between the United States and England when the American publisher Norton decided to distinguish itself from the English publisher by changing the ending of the story. Indeed, the American publishers, outraged at the idea of making a purely villainous protagonist nice at the end and thus engendering empathy for a criminal in readers, decided to censor the 21st and last chapter of the book. By doing this, the novel ended with a picture of a young criminal who, after being tortured and brainwashed into becoming a good citizen, has returned to his original state as a ruthless criminal and released back into society with the risks that this entails. This resulted in a rather pejorative image of England in the United States where "Burgess's novel was widely perceived as a compelling and horrifying account not only of future developments but also of the present state of British and, to a lesser extent, American society" (Krämer, 2011:83).

In other words, the reception of *A Clockwork Orange* when it was released in 1962 was not without bumps. Although adulated by some for its audacity, the novel soon became the object of harsh criticism for its violence and its pejorative image of the English-speaking world which, at the time of its publication, was experiencing a flourishing period:

> The decade was a time of unprecedented economic growth, nearly full employment, levels of economic equality for which people today are nostalgic, historic racial progress, and the blossoming of government social programs, not to mention medical advances that made victims more likely to survive being shot or knifed.
>
> (Pinker, 2013)

The deprecatory aspect it brought to the novel seemed inexplicable to some literary critics and reviewers who did not hesitate to claim that it was a gratuitous display of violence. Nevertheless, other experts such as Peter Krämer and Dedria Bryfonski, agreed that the violence in Burgess' novel was far from senseless and that it served to "demonstrate that a world with violence chosen freely is preferable to a world of conditioned goodness [...]", that is to say that

"the violence was necessary to show the horror of the existence Alex [the protagonist of the novel] was leading" (Burgess quoted in Bryfonski, 2015:43). This statement, which will fully come to make sense throughout this research, is one of the answers to the many questions triggered by the violence of *A Clockwork Orange* but also by many other approaches that can be used to study the book.

Indeed, although often examined through the prism of fiction, that is, studied in terms of literary language and narrative, Burgess' novel can be the subject of a multitude of analyses that reveal more interesting elements than others. To enumerate all these perspectives that can be used would be too laborious and unnecessary for the purposes of this research. However, it is relevant to mention some of the approaches through which *A Clockwork Orange* can be interpreted in order to show how Burgess proved to be a writer of his time, sometimes without realising it. Hence, feeding on his life experience, the world he lived in and the events taking place in it to write, Burgess has indeed allowed his work to be described, as the following study will argue, as innovative in the 1960's.

### *A writer, a life: an autobiographical approach*

It would be foolhardy to ignore the fact that many scholars have pointed out the blatant connections between Burgess' private life, interspersed by tragedies, and his work *A Clockwork Orange*. It is true that, as for many authors, the writing of this novel was for Burgess a real catharsis allowing him to overcome the traumatic events of his life and in particular his wife's assault, in 1943, carried out by "four American deserters [...] in London" (Krämer, 2011:xvii) while Burgess was serving in the British Army. Pregnant at the time of the attack, Burgess' wife lost the child and died a few years later without ever having fully recovered. After this traumatic experience, Burgess will hardly surmount "the consuming rage he had felt initially against all American soldiers" (Aggeler, 2015:24) and the war in general. Hence, he himself explained:

> I had to get this damn thing [the assault of his wife] out of my system. I wrote the scene where a writer and his wife are attacked… the house they live in is called "home". That's how strongly I felt.
>
> (quoted in Krämer, 2011:xviii)

Having been personally affected by the war as a soldier but also as a victim of his wife's suffering, Burgess was aware of the impact of his personal experience on his writing. He wrote to get rid of a burdensome past and many of his novels illustrate this fact, such as *A Vision of Battlements*, which tells the story of a soldier who has to teach young recruits the art of war, just as Burgess had to do, or *The Right to an Answer*, which features "woman-beating incidents" (Aggeler, 2015:24-25). Admitting his distrust of human beings, Burgess stated that "[m]an is basically evil, anyway... we are all essentially aggressive and will never be anything different" (quoted in Krämer, 2011:xviii). This last statement demonstrates how much *A Clockwork Orange* can be analysed as including autobiographical elements such as experiences, opinions, feelings and the fear of his own human nature.

However, the violence Burgess witnessed and experienced in his life is not the only autobiographical element to be highlighted. In fact, many aspects of the author's life are present in *A Clockwork Orange*, from the most abstract to the most tangible. Amongst others, it is quite easy to notice a certain religiosity that has been the subject of many works and analyses with regard to *A Clockwork Orange*. To mention just one of many, Rubin Rabinovitz, in his article "Ethical Values in Anthony Burgess's 'Clockwork Orange'" (1979), explores how the question of good and evil in human beings and especially free will allowing them to choose between the two can be considered in terms of religion. More precisely, Rabinovitz outlines how it can be seen in terms of the conflict between the Pelagians – believing in the perfectibility of humans and in their capacity to do good by themselves – and the Augustinians – showing a lack of faith in human perfectibility and advocating a strict life to get closer to God. According to Rabinovitz, Burgess would highlight this opposition between faith and lack of faith in humans and their choices in order to demonstrate that one should not either leave all freedoms to them regardless of the consequences (according to a libertarian Pelagian perspective) or try to restrict humans even if it means completely depriving them of their free will (according to a strict and authoritarian Augustinian perspective). For Burgess, what is at stake in his novel is a balance that has to be found between both: a "ying-yang opposition" (Rabinovitz, 1979:49). However, to go into the details of a religious analysis which is as long as it is interesting is not relevant here but it is nevertheless necessary to note, Burgess being Catholic and involved in the religious debates of his church, that a religious approach can be fruitful especially because it finds echoes in the personal life of the writer. Concretely, in *A Clockwork Orange*, this religiosity can be perceived when Alex, imprisoned for his crimes, befriends the prison chaplain

who makes him read the Bible and participate in the church services organised for the prisoners. This theme of religion and what it brings can also be linked to the fact that Anthony Burgess totally dedicated his life to writing, from 1960 onwards, after learning that he had only one year to live due to a brain tumour that was discovered at a late stage. In the end, he survived the disease much longer than predicted, dying of lung cancer in 1993, but it is possible that this proximity to death brought him closer to his religious believes. In any case, it was undoubtedly this tragic element that marked the writer's most prolific period.

These two autobiographical elements, Burgess' religiosity and his wife's attack can be accompanied by another one which is that of music. In fact, before becoming a soldier, teacher or writer, Burgess had other ambitions. Notably, "his most persistent youthful ambition was to become a composer, and when he entered the University of Manchester, he wanted to study music" (Aggeler, 2015:23). Burgess was even a pianist in a jazz bar for a time in 1946 in London. The importance of music in his life is strongly echoed in the novel analysed here since, as it will be demonstrated in more detail later, Alex, although a heartless criminal, is passionate about one thing: classical music. As a matter of fact, this music is a key element in *A Clockwork Orange* since this musical passion, which is one of the only things that makes Alex human in the eyes of the readers, will be taken away from him by force and torture.

Burgess, who is also passionate about linguistics and languages, will not only showcase his passion for music in his novel. By inventing a language he calls *Nadsat*, he fulfilled one of his dreams. Associating Russian, English and, as certain scholars suspect, notions of African languages, such as Malayan, he created a language that his protagonist will speak from scratch. Moreover, *Nadsat* is both a musical and surprising language spoken by young people, often gang members, demonstrating a particular place of this section of the population in the novel. With this novelty, Burgess not only fulfilled his linguistic ambitions but also challenged his readers to read in a language they had never heard anywhere else before. In his article "The Relevance of Voice for Understanding Ethical Concerns Raised by Nabokov's *Lolita* and Burgess's *A Clockwork Orange*" (2013), Nicolas Estournel states that this challenge to the reader helps the latter to find a reasonable distance from the protagonist while at the same time identifying with him. Indeed, empathy and complicity is created through the knowledge of the same language which seems to be known only by some of the characters in the novel and partly by the reader: this creates a bond between them. Nevertheless, due to his lack of mastery of the language, the reader is somehow kept at a distance from the story and from Alex, who speaks perfectly *Nadsat*. As a consequence, in trying to find a balance between distance and

identification, “the reader is asked to question the ethically of the ambiguous story and the ethically ambiguous narrator” (Estournel, 2013:6). In that case, Burgess, while fulfilling one of his ambitions, confronts his readers and creates a link between them and his character while encouraging them to investigate deeper. It will be shown in this research that this encouragement to reflection is part of a maieutic tendency that the author follows.

Hence, the autobiographical elements in Burgess’ novel are numerous. Violence, religion, linguistics, music are all aspects of his private life that the author shared with his readers by integrating them in his narrative. Yet perhaps the most remarkable and surprising element from this shared private life is the title of the book: *A Clockwork Orange*. Often the keystone of a book, the title of the novel represents even more in Burgess’ case since it perfectly epitomises the message of his work as it will be analysed. In addition, this title comes, once again, from an experience that the author had during his various travels. It was indeed during one of these journeys that Burgess heard the expression ‘as queer as a clockwork orange’, which would mark him to the point of wanting to write a book for which it would be the title. It is in his article “A Clockwork Condition”, republished in *The New Yorker* in 2012, that Burgess explained the origin of this outlandish phrase:

> I first heard the expression “as queer as a clockwork orange” in a London pub before the Second World War. It is an old Cockney slang phrase, implying a queerness or madness so extreme as to subvert nature, since could any notion be more bizarre than that of a clockwork orange? The image appealed to me as something not just fantastic but obscurely meaningful, surrealistic but also obscenely real.
>
> (Burgess, 2012:3)

As mentioned by Burgess, this expression is basically used as a kind of insult to mock someone attracted by people of the same sex and, in consequence, who defies nature. It may seem strange to use an insult like that for a title, but Anthony Burgess was going to give that phrase a whole new meaning. Forgetting its pejorative side, he used it in a deeper sense to designate a human without juice, a human deprived of free will, who could no longer make choices and would then become a machine repeating the same gestures without purpose or soul. Of course, it is very easy to understand that the clockwork orange of the novel is indeed the protagonist, Alex, who will be tortured to prevent him from choosing between good and evil. Becoming good by force, he loses his humanity and becomes a state machine deprived of his passion, music, his freedom of expression, his free will and even his freedom of thought (since even thinking evil makes

him suffer). In this research, this ambiguous relationship between organic and mechanical, as well as between human and technology, will be further analysed in the context of the book's publication in 1962, but also through a more contemporary perspective specific to the 21st century.

In conclusion, all these considerations reflected in Burgess' writings are, as it has just been established, the obvious result of personal events that affected the author. Nevertheless, it should not be forgotten that Burgess owes his personal circumstances to a more general context. That context is none other than the century in which his work flourished: the 20th century. Unfortunately, only few critical works have explored the real impact that the 20th century, above all the wartime and post-war context which, among other things, composed it, had on many authors, including Anthony Burgess. One of the reasons for this is maybe that it should be remembered that Burgess' novel was published in 1962. It does not represent a whole century but rather the first half of it which, as it will be seen, was marked by many traumatic events, notably the wars which, in the few decades that followed, gave rise to a post-war period which has left its imprint on many literary works, including *A Clockwork Orange*.

### *The 20th century and the post-war period: a sociological approach*

Dominated by changes and tensions, the 20th century, or at least the first decades of it, was as much the century of technological progress as it was the century of disasters such as a totalitarianism's breakthrough, two world wars, the Cold War and nuclear weaponry. All this evidently created a post-war context, the one in which Burgess wrote and published *A Clockwork Orange*, characterised by the fear of a new world war, of the return of totalitarianism, but also by the expectation of the next destructive idea with which human beings will come up. It is indeed the will to stand up against this human violence, perhaps even more than the search for catharsis mentioned earlier, that drove Burgess to write the novel under analysis here. In fact, he clearly outlined in an article written for *The New Yorker* that:

> It sometimes happens, however, that a mere entertainer like myself is drawn, against his will, into the sphere of "serious" thought. He finds himself forced to give his own views of deep matters. The occasion of this compulsion may well be […] a novel that, because of an uncontainable concern or anger with something taking place in the real world, the novelist – to his shame – made less of an entertainment than usual, more of a sermon or homiletic of didactic statement […].
>
> (Burgess, 2012:2)

This willingness to write about the real world awakened by anger or interest in events is not an isolated case embodied by Burgess alone. After the two World Wars, the Cold War, the Nazism, and the violence that human beings have been able to demonstrate in all these events, especially throughout certain technological innovations (brainwashing, techniques of torture, nuclear weapons…), the intellectuals and a large part of the population have been asking questions about human nature, its future and the violence it can contain.

Like Burgess when he stated that human beings are aggressive and cannot detach themselves from this belligerency, the violence deployed by humans during the events of the 20th century raised questions and issues among the citizens of the time. This was a real existential tsunami that swept away the spirits at that time, as Robert K. Morris points out in *The Consolations of Ambiguities* (1971): "[...] while the existential novel is undoubtedly the high-water mark of modern literature, its array of violence, flight, suicide, and murder renders life permissible only in terms of its tragic permutations" (5). Morris, in his book dedicated to the entire literary work of Burgess, expresses how Burgess' novels are often mirrors reflecting the tragic events of his life and the world around him. This attitude, as outlined by Morris, is part of a modern existential literature of the 1960's that describes the tragedies of an era. As a matter of fact and as the existential term used by Morris indicates, it was the very existence of the human being that was being troubled here, or rather all the possibilities of a future including a non-future. Faced with the human violence opening up the possibility of the extinction of the human race, anxiety soared.

However, Morris is not the only one to bring this existential questioning to the forefront. Mark Greif has decided to dedicate a book to it, *The Age of the Crisis of Man* (2015), and to give this phenomenon a name: "the Crisis of Man" (3). Greif defines this crisis as a phenomenon specifying "the danger of the end of barbarization of Western civilization" (3). According to him, "[t]hough debate over human nature was not new, the stakes of the old debate changed by 1939. With the Nazi threat, […] [t]he question of man became a genuinely new debate" (27). Hence, Greif defends the idea that the 20th century, and more precisely the period following the two World Wars, was a period of crisis that awakened many existential issues affecting human beings. This crisis affecting humans soon gave rise to a stormy debate generated, more precisely, by a feeling of fear in the face of the violence humans were capable of during the war. The origins of this violence were particularly problematic: "Where man can find no answer, he will find fear. When the dust was still settling over Hiroshima, he was asking himself

questions and finding no answers. The biggest question of these concerns the nature of man. 'Is war in the nature of man?'" (Cousins quoted in Greif, 2015:62). That's what another author, Hanna Arendt, called "The Burden of Our Time" (Greif, 2015:91): all the questions raised by the violence deployed during the World Wars and afterwards put a weight on the shoulders of the citizens of the time, of which Burgess was one. The debate between those who believed in a malleable human nature that could be changed for the good of all and those who believed in a fixed, naturally aggressive and unchangeable human nature flourished[1]. According to Mark Greif, the intellectuals of the first decades of the 20th century were afraid that "human nature was being changed either in its permanent essence or in its lineaments for the eyes of other men" (2015:3). The pejorative view of human nature engendered by the tragic events of the first half of the 20th century has thus triggered a sense of fear: should human nature be changed? Is human nature naturally bad? Do we have to change the human being in depth? This way of thinking and questioning led Greif to conclude that "Man has always been his own most vexing problem" (2015:4). Confronted with the atrocities it caused, the human being no longer knows what its real nature is. As Hannah Arendt, quoted by Mark Greif, sums up perfectly: how should humans react when faced with "[t]wo World Wars in one generation, separated by an uninterrupted chain of local wars and revolutions, followed by no peace treaty for the vanquished and no respite for the victor", ending "in the anticipation of a third World War between the two remaining world powers [Russia and USA]" (2015:5)? Is this supposed to lead to the "emergence of a new human type, [a] totalitarian man [...] destructive and dominant" (Greif, 2015:6) as represented by the Aryan race idolised by Hitler, or does it mark the end of humans, who then seem to be the trigger of their own demise. Each possibility seeming more frightening than the other, it is not surprising that the intellectuals of the time have addressed this decisive question of "What is man?" (Greif, 2015:7) and came to the equally frightening conclusion that if the human is its own problem, should not its nature be changed as deeply as possible? On this point, R. K. Morris seems to agree, stating that "[h]uman problems are inexhaustible so long as there are human beings"(1971:74), while adding that "eradicate one and you eradicate the other" (1971:74). The anxiety created by this vicious circle of reasoning perfectly demonstrates the phenomenon of crisis that Mark Greif perceives as characteristic of the 20th century's post-war context.

[1] The concept of human nature here is to be defined and understood as the set of traits common to all human beings, for example free will, governing their behaviour, feelings and thoughts and guaranteeing their belonging to humankind.

At this stage of the analysis, what is interesting to highlight are the words of Morris who defends "the contemporaneity of Burgess' issues" (1971:57) and of his works, in particular *A Clockwork Orange*, which he describes as being "actually extensions of present conditions rather than forecasts of the future ones" (1971:56). Through this reasoning, Morris argues that the issues and the crisis in the world, particularly in the West during the post-war years, completely influenced Anthony Burgess' writing and this can be seen through his treatment of certain themes such as violence and technology that emphasises a clear reflection about human nature.

In fact, it is obvious from the very first pages of the novel that modernity oozes from the words of Burgess' novel. For example, the already mentioned teenage language used by Alex, the young delinquent and protagonist of the novel, plunges the reader into a certain modernity:

> 'What's it going to be then, eh?'
>
> There was me, that is Alex, and my three **droogs** [friends], that is Pete, Georgie, and Dim, Dim being really dim, and we sat in the Korova Milkbar making up our **rassoodocks** [minds] what to do with the evening, a flip dark chill winter bastard though dry. The Korova Milkbar was a milk-plus **mesto** [place], and you may, O my brothers, have forgotten what these **mestos** [places] were like […] [my emphasis].
>
> (Burgess, 2013: 7)

Called *Nadsat* and described by R. K. Morris as "a technico-Russo-Anglo slanguage" (1971:1), this language directly gives the reader an active role of decoding and demonstrates Burgess' willingness – "fed up with the modern state even in 1959" (Morris, 1971:34) – to change. The detectable Orwellian influence here, which already shows that the novel is part of the modern dystopian turn of the time, will be discussed later. However, even if the language invented by the author is the first discovery the reader encounters, it does not mean that it is the only element in which it is possible to perceive the influence of a post-war context. Of course, *Nadsat* is a central element of the novel, but this centrality is also due to the fact that it allows other features of the novel that can be said to be 'of their time' to be brought forward, namely violence and technology. These two features are the sources, as the personal and post-war contexts have already been examined to be, of particular approaches of *A Clockwork Orange* leading to

different interpretations which make the novel's contemporaneity all the more obvious to a 21st century reader.

A first approach to Burgess' novel can be achieved through his treatment of violence. In fact, Burgess deals with this theme, as a key element of the novel, as emphasised in *Violence in Anthony Burgess's A Clockwork Orange*, edited by Dedrya Bryfonski in 2015. Bringing together several opinions of different intellectuals, mainly from the academic community, this book offers several explanations for the strong presence of violence in *A Clockwork Orange*. Some, such as Geoffrey Aggeler, claim that the violence refers mainly to the dramatic events previously covered that marked the author's life – for instance the assault of his wife but also his experience in the army. Others, like Melissa Klein, claim that it was the uprising, in the 1960's, of youth gangs in search of thrills that inspired Anthony Burgess. These two interpretations are two crucial trains of thoughts to follow and should not be underestimated. As far as the influence of the writer's personal experience is concerned, it has already been outlined that this is strongly perceivable in *A Clockwork Orange*. What is more interesting here is an influence that can be detected in terms of the youth movements. Indeed, in the 1950s and 60s, teenage gangs were flourishing in a post-war context in which youngsters were struggling to find their place and a balance between an inglorious, violent past and an uncertain future. Faced with this conundrum that they have to overcome, young people were in search of identity, of belonging and decided to make themselves noticed through violence in order to have the sensation of existing in the face of a horrible past overshadowing the present. This increase in violence among young people is not just one isolated event in a city or a country. In fact, many experts, such as Steven Pinker, have examined the causes of this renewed violence. One of the reasons for this interest was that this violence, as advocated by Steven Pinker in his article "Decivilization of the 1960's" (2013), "defied every expectation" for two main reasons. Pinker outlines the first one as follows:

> The decade was a time of unprecedented economic growth, nearly full employment, levels of economic equality for which people today are nostalgic, historic racial progress, and the blossoming of government social programs, not to mention medical advances that made victims more likely to survive being shot or knifed.
>
> (Pinker, 2013)

Indeed, after the two World Wars and the Cold War, which damaged the world's economy, the situation stabilised and even flourished in the late 1950s and in the 1960s. It is therefore very surprising that despite the relatively good health of English-speaking society, a sharp increase in violence, especially among youngsters, had been notable in the United States as in England.

The second reason for the incomprehension accompanying this violence is obviously that after the first decades of the 20th century having seen the two World Wars, the Cold War, the Great Depression in the United States, the emergence of nuclear weapons and others, it is very surprising that violence is making a comeback. The question then becomes "[w]hy did the Western world embark[ed] on a three-decade binge of crime from which it has never fully recovered?" (Pinker, 2013). In other words, why allow violence to regain power when people have just emerged from two World Wars that were perfect illustrations of the damage that can be caused by excessive violence?

Many have attempted to answer this question, and many seemed to agree that it is a combination of factors, not a single major cause, that are at the root of this violent rebound. Indeed, Pinker, like many others, defends the idea that it is in particular the convergence between the effects of the post-war baby boom, that is to say the increase in births in the late 1940s, and the technological evolution, especially of the media, which caused this outburst of violence in England. In fact, in the 1940s and 1950s, the baby boom phenomenon led to an increase in the number of teenagers between the ages of 15 and 20 in the 1960s (generation of baby boomers itself) who quickly exceeded the number of people over the age of 20. At the same time, this generation of baby boomers proved to be the first generation to live all their youth with television and radio transistors that generated "a sense of solidarity, as if their generation were an ethnic group or a nation" (Pinker, 2013). It is true that the connection that technology's development in the media created allowed the young people of the 1960s to realise that they were not alone in living the youth they lived. Very quickly, what Pinker called the "decivilization of the 1960's" (2013) took place and was characterised by a strong influence of American culture on English youth. Popular culture such as rock'n'roll or hippie culture but also social movements such as the Civil Rights Movement crossed the Atlantic and reached young people in England. These mainly anti-war movements were often known for their bases of love and peace, yet many youngsters, especially in England, quickly wanted to be "more than the youth section of the establishment" (Pinker, 2013). These young people have therefore sought to exist in the midst of these youth movements, sometimes turning to violence. In an inspiring Ted Talk in 2017, Craig Pinkney, looking for causes that can lead youth to violence,

reminded his audience the following phrase “it takes a village to raise a child” and then led to the idea that “when you do not recognise the village” or “if young people do not feel part of the village, they will burn it down to feel its warmth”. In this particular post-war situation depicted by Pinker, young people, despite the economic growth of their society, no longer recognise themselves in their government and its decisions (but also their parents’) and the only way for them to be heard is in a violent way. Some during demonstrations, others really looking for a community, a village to belong to turned to gangs.

It is therefore in these circumstances that “[i]n 1960 Burgess [...] returned from his teaching assignment in Brunei to London, where [he] witnessed the new phenomenon of teenage gangs” (Bryfonski, 2015:13). First confronted with “[t]he nattily dressed teddy boys [London gang from the 1950’s] who terrorised the citizenry of London” (Bryfonski, 2015:13), Burgess, during a trip to Russia in Leningrad, soon realised that the same thing was happening there. All the violence perpetrated by “the alienated youths who make urban life a misery for the old and weak” (Foreman, 2015:153) marked him. This recent rise of gangs, and consequently of violence, is particularly noticeable in Burgess’ novel. Many critics, such as P. Krämer, soon became aware of this particularity:

> Many critics noted the close links between the fictional world of the book described [*A Clockwork Orange*] and the realities of contemporary society: ‘The teen-age world of Alex and his gang is unrelievedly evil by our standards although it is all too like the headlines in almost any big-city newspaper’ (*Analog*, 1963). In particular, the novel was said to mirror the real-life problem of juvenile delinquency […].
>
> (Krämer, 2011:59-60)

In consequence, Alex is the perfect example of a young delinquent who is a member of a London gang consisting of a leader – himself – and three other droogs. He also proves to be the ideal embodiment of the “teen-age world” invoked by Krämer. This delinquent, barely 15 years old (average age of the baby boomers mentioned above) at the beginning of the novel but already responsible for numerous crimes, seems to quickly become aware of the chaos he generates when, during one of his misdemeanours consisting of the beating of a drunken man, his victim defines the context of teenage violence that characterises the futuristic London of the novel:

> It's a stinking world because it lets the young get on to the old like you done, and there's no law nor order no more. […] What sort of a world is it at all? Men on the moon and men spinning round the earth like it might be midges round a lamp, and there's not no attention paid to earthly law nor order no more. So your worst you may do, you filthy cowardly hooligans.
>
> (Burgess, 2013: 20)

The setting is put down: the situation of Alex and his droogs is not an isolated case. Many young people decided to turn to violence to feel like they exist because they felt invisible in their society. In the novel, the reader is presented with a world in which the old and the weak are threatened by the young. Burgess' world is one where "[e]very day there [is] something about Modern Youth" (2011:47) in the newspapers, as Krämer already points out above in the real-world. Yet, 'Modern Youth' is perhaps not the only one to blame as Alex notices: "it was the adult world that could take the responsibility for this with their wars and bombs and nonsense. […] So we young innocent malchicks [boys] could take no blame. Righ right right" (Burgess, 2013:47). Once again, the reader can sense the influence of wartime violence on Burgess' story: how young people can grow out of violence when such a past pursues them?

An interesting note in terms of the violence displayed in *A Clockwork Orange* is also that, while both explanations – the influence of personal life and of the gangs phenomenon – put forward are quite relevant, the justification of the violence that seems to recur most often among experts is that of an inhuman society, inspired by totalitarian regimes, which, trying to create stability by imposing rules of conduct, deprived human being of its free will. As a result, individuals like the protagonist of the book, Alex, feel dehumanised for the sake of society and its government. In consequence, it is the adult world that is to blame. After the utmost violence of the two world wars and the subsequent Cold War, stability has become a justification for even more violence, including torture undergone by criminals like Alex with the Ludovico's technique to annihilate their brutal impulses. Having fought totalitarianism, the latter seems to return hidden under the mask of the common good. This has been underlined by Burgess in his book through the numerous references to the World Wars and the Cold War that are scattered throughout the novel, notably in the second part of the book, which recounts the torture Alex undergoes during his treatment[2]. Burgess himself admitted that the London he has created in his novel was "a sort of compound of [his] native Manchester, Leningrad and New York"

[2] For example: "And then, I was forced to viddy [watch] a most nasty film about Japanese torture. It was the 1939-45 War, and there were soldiers being fixed to trees with nails and having fires lit under them and having their yarbles [testicles] cut off, and you even viddied [watched] a gulliver [head] being sliced off a soldier with a sword […]" (Burgess, 2013:116).

(Biswell, 2013:xxi), representing the great agents of the two World Wars and the Cold War. Is the war really over? Is totalitarianism really dead? This is also demonstrated by the dehumanisation that Alex undergoes when he is locked up in one of the government prisons and is no longer 'the Humble Narrator' of the beginning but a number, "6655321" (Burgess, 2013:105). By all means, criminals are dehumanised. As Mister F. Alexander, the writer assaulted at the beginning of the book by Alex who then rapes his wife, denounces, "[b]efore we know where we are we shall have the full apparatus of totalitarianism" (Burgess, 2013:173). Responding to fire with fire, the government represented by brutal and heartless police officers replies to crime with crime. The difference is that their violence seems to be justified by their status of protectors of the state.

In the end, the violence displayed in Burgess' novel, whether it is rooted in the great wars of the 20th century, in the juvenile delinquency of the 1960's or in the author's personal experience, is indeed a key element of the novel. This violence demonstrates once again that many biographical elements can be used to interpret Burgess' work but also sociological elements. In fact, it can be perceived that beyond his personal experiences, Anthony Burgess is also strongly influenced by the society in which he lived, which makes his work very contemporary. Already through its treatment of violence, it reflects the shocking events of Western society such as the post-war context, the phenomenon of violence and gangs among young people and totalitarianism of the two World Wars.

Criticised by some scholars as mentioned in the previous section, the violence of the novel is, as a matter of fact, the opposite of gratuitous for Burgess. Strongly rooted to the post-war context of the 20th century as demonstrated above, the rage Alex displays is not only there to denounce an overly oppressive government or the mistakes of a past that cannot be changed anyway. Alex's murderous impulses, as well as the violent response of the government, is included for what might be called a maieutic purpose. This concept of maieutics has been highlighted by Mark Greif in his book as a characteristic of the discourses and works of 20th century intellectuals influenced by the 'Crisis of Man' phenomenon. He defines maieutics as follows:

> The maieutic, by insistent and forceful questioning, seeks to bring into being and bring to birth *in another person* answers that will reward the questioner's own belief in the character of the universal capacity for thinking – and do something to the other person's character, too.
>
> (Greif, 2015:24)

This is why a discourse like Burgess', whose aim is "to bring ideas to birth as a means, too, of coalition, and interpersonal mobilization" (Greif, 2015:24), is a maieutic discourse. And Mark Greif is not the only one to have revealed this function. As far as *A Clockwork Orange* is concerned, Nicolas Estournel argues in his previously mentioned article that "the reader is asked to question the ethically of the ambiguous story and of the ethically ambiguous narrator" (2013:6) which means that the reading of Burgess' novel "involves a critical judgement on the reader's part" (2013:7). Burgess is in fact trying to make the reader react while reading his novel, encouraging them to ask questions about the violence of the novel's protagonist, but also about the violence deployed by the government to stifle Alex's impulses. Is it ethically right? Is it not changing human nature to impose goodness and political correctness on human beings? In other words, as Robert K. Morris points out, "Burgess asks whether it is better to be an evil human being with free choice, or a "good zombie" with no choice" (1971:69). But then, what is the true nature of the human being? Good? Evil? Its possibility of evil decisions taken away, is the human being dispossessed of its human nature? Fundamentally, what is human nature? Is this human nature that is at stake when a totalitarian regime decides to impose its way of thinking and living? All these questions about human violence, its origin and its link to human nature, emerge in the book and infiltrate the mind of the reader who is, as in the Socratic maieutic, confronted with questions that he or she did not even think him/herself capable of asking. Is the violence that was so present during the two world wars, during the Cold War, during the bombings of Nagasaki and Hiroshima and other tragic events of the 20$^{th}$ century naturally linked to human nature? Are humans naturally doomed to destroy what surrounds them and, as a result, to destroy themselves? All these questions demonstrate the usefulness of the violence in *A Clockwork Orange* which is intended to make the reader investigate his or her own human nature and what makes him or her human beyond the atrocities they are capable of.

Within this reflection triggered in the reader, it is possible to understand how modern Anthony Burgess' novel was at that time and how, nowadays, it can be perceived as a post-war novel. In the case of a post-war novel, violence is already a concept of its time. However, in addition to this, it should also be noted that the 'Crisis of Man' as defined by Mark Greif is also present in the book. Burgess makes his readers reflect upon human nature and the possible changes it must, or not, undergo in order to prevent the atrocities of the past from occurring again. And perhaps it is relevant to mention the fact that Anthony Burgess was not the only writer to have such a strong awareness of the world around him. Indeed, to take only one famous

example, Aldous Huxley, in his utopian novel *Island*, also depicts a great questioning in a maieutic purpose regarding human nature and especially war. In his novel, Huxley describes life on an island completely, or almost completely, cut off from the rest of the world, and in a utopian style different from that of Burgess, to highlight how human nature can combine with its environment to work in peace and harmony without war. In his novel, the government of the island does not even have an army. Can human nature be good? Do human lifestyles influence how they define their own nature? Is there a better future where human nature would not be synonymous with war? So many questions are asked of the reader in Huxley's novel in the same way as Burgess in order to denounce wars, among other things. This shows that Burgess is not an isolated case in the world of literature. This will also be the subject of more detailed attention in the rest of this research.

A second approach is possible when looking at the way *A Clockwork Orange* also addresses the theme of technology. Technology, like violence, haunts Western societies since the 20th century, increasingly evolving and expanding in human beings' lives.

In *A Clockwork Orange*, technology is used by the state to destroy the criminal tendencies of the young hero, or anti-hero, who is particularly aggressive. However, one should not expect high technology in this novel. The 21st century reader should bear in mind that the book was published in 1962 and that all the technology known today – scientific, physical, space-based... – was not yet fully up to date at the time. With this in mind, one can see how original Anthony Burgess' perspective was, based on what he observed during his service in the British Army and during his travels to exotic countries such as Brunei and Malaya but also America and Russia. During the 20th century, technology is becoming progressively important in the daily life of English citizens, as in the rest of the world. The wars already mentioned several times showed a technological development that was then still in its infancy. Nuclear bombs, methods of torture, armaments... are just some examples of what the military field was capable of. However, one should not forget fields such as entertainment (television, media, household appliances...), science (research devices, spacecraft[3]...) or medicine (medical devices, drugs...).

[3] In the example given above of the monologue of a drunken man being beaten up by Alex and his companions, the reader can see the old man denouncing the obsession of men with the discovery of space, which they seek to push to extremes while the atrocities that take place on earth are ignored: "What sort of a world is it at all? Men on the moon and men spinning round the earth like it might be midges round a lamp, and there's not no attention paid to earthly law nor order no more" (Burgess, 2013:20).

This acceleration of technological development is a theme addressed by Hartmut Rosa at a TedTalk gathering in 2015. In this presentation, Rosa told his audience that he was convinced that "social acceleration is the problem of our modern world". He then explained that since the 18th century, the world has been constantly modernising, revitalising, and changing, first with steam engines (steam boat) and then with trains, bikes, cars, and other inventions that have energised the world or rather set it in motion. Thanks to all these creations, it is not only humans who have seen their mobility improve so quickly but also, according to Rosa, ideas, goods, images, messages. Since then, technology has continued to develop, human interactions have continued to change, and our lives have continued to accelerate. It is here that Rosa's concept of social acceleration takes on its full significance. As a result of an acceleration of the world's development, citizens' lives have themselves undergone an acceleration that they are no longer able to bear. With the arrival of capitalism, which is based on the idea of growth and acceleration, human lives themselves have become capitalist objects. Humans have to keep up the pace and it got increasingly complicated. As a consequence, anxiety and oppression appeared: humans no longer feel themselves in their own lives, which keeps telling them to accelerate and become like machines. And yet they accept this because they believe, as Rosa argues, that this is the key to happiness: to work more, to have more money and to be able to offer themselves a world in which they no longer identify themselves. This is what Rosa calls "psychological desynchronization", which means no longer feeling in tune with the world, or, in other words, alienation. The capitalist organisation of society is increasingly desynchronised with its citizens, with the nature and democracy for which many fought, especially during the two World Wars. This is exactly what was already happening when *A Clockwork Orange* was published: the rise of capitalism, the acceleration of lifestyles, the development of technologies... were experienced by Burgess.

Furthermore, as technology developed rapidly in a variety of domains, what can also be seen in Anthony Burgess' novel is the growing fear of a new technology that is taking up progressively more space in the daily lives of human beings and that – poorly used as by totalitarian societies in massacres, in moral enhancement or behavioural punishment techniques (such as Ludovico experiment) – could cause the loss of humans by turning it into a fruit without juice, a human being without human nature, without free will or, in other words, into a robot. This is noticeable even before opening Burgess' book, just by reading and reflecting on the title, *A Clockwork Orange*, as already explained earlier in this research. In fact, surprisingly enough and forgetting the original pejorative use that is linked to the expression, it is possible to see

how the clockwork orange mentioned served to highlight something unnatural. This idea of going beyond what nature allows, is this not a definition that would perfectly describe the purpose of technology? To be able to go so far in advancement that nature would be overcome? Perhaps even human nature. It may be that it was this perspective that struck Anthony Burgess when he heard this insult. Whatever it was, it stayed stuck to his mind until he realised that the era in which he lived gave a particular enlightenment to those few words:

> The forced marriage of an organism to a mechanism, of a thing living, growing, sweet, juicy, to a cold dead artefact—is that solely a concept of nightmare? I discovered the relevance of this image to twentieth-century life when, in 1961, I began to write a novel about curing juvenile delinquency. I had read somewhere that it would be a good idea to liquidate the criminal impulse through aversion therapy; I was appalled.
>
> (Burgess, 2012:3)

Burgess was therefore well aware of the topicality of his book. He knew that the tragic events at the beginning of the century had awakened doubts and fears in the world's citizens. He knew that the technological progress of the time did not help but instead only added to questions and fears concerning the future of humans. He was aware of all this and presented it to his reader by perfectly summarising his message in a title: *A Clockwork Orange*. Nonetheless, the interpretation of the title can go even deeper, as Peter Krämer has argued. Indeed, Krämer warns his reader that the expression 'a clockwork orange' can go in two directions: "it evokes the dangers of people being reduced to objects, but also the promise of objects coming to life" (2011:27). Fears are embodied: the fear of dehumanisation – an organism becoming a mechanism – and the fear of technology – a mechanism becoming more powerful than the organism, human or not. In both cases, technology – through the concept of mechanism – is perceivable.

Bearing in mind the message and fears associated with the title of the novel, it is possible to return to what technology embodies through aversion therapy known as the "Ludovico's Technique" (Burgess, 2013:92). Living in a society that "illustrates a culture that is slowly becoming one, all-consuming machine' and in which he is 'as a criminal, [...] a pariah" (Moya, 2011:2), Alex, having committed numerous crimes and having been sentenced to an imprisonment of 14 years, is obliged to undergo a cure. Organised by the government, the so-called "Reclamation Treatment" (Burgess, 2013:104) aims to transform Alex into an utterly good person so that he can be released into society without being a danger to others and so the

prisons, at the same time, would be depopulated. Yet, things are not so simple. To understand the implications of such a cure, the reader must understand how it works. Described as "a drug-assisted 'aversion therapy'", Ludovico's technique is "a form of brainwashing" or, in other words, "a behavioural conditioning treatment" (Zengin, 2015:97). Based on the theories of behaviourism "popularized by Harvard psychologist B. F. Skinner in the 1950s and 1960s" (Zengin, 2015:97), the Ludovico's technique consists of watching films displaying scenes of torture, rape, fights, wars, etc., which, when accompanied by the intake of a drug causing nausea in the subject, generates an automatic reaction in the latter who becomes ill as soon as he is in the presence of, thinks about or participates in a brutal act, verbal or physical. Repetition is therefore a key notion for this therapy to be successful, as it is what makes the treatment torture for Alex. With his eyes held open by a device attached to his head, Alex is forced to watch the entire film. Alex, living in "a detached and uncaring society where ultraviolence is the only method of saying, 'I am alive'" (Heller and Kiraly, 1974:199), is then the victim of "behaviour modification [which] is now considered as a new technology" (Heller and Kiraly, 1974:200). It is therefore a question of behavioural or moral enhancement aimed at modifying an individual's behaviour to improve his or her moral values.

The concern with this technique is that the outcome remains uncertain. If goodness is imposed, is it true goodness? If the choice to be good or evil is taken away from a person, is it fair? This question is expressed by the chaplain of the prison to which Alex is sent when he confesses that he is willing to volunteer for the cure in the hope of getting out of prison sooner:

> I must confess I share those doubts. The question is whether such a technique can really make a man good. Goodness comes from within, 6655321. Goodness is something chosen. When a man cannot choose he ceases to be a man.
>
> (Burgess, 2013:92-93)

Is a human being still human without free will? That is the big question asked here by the chaplain to an Alex who is still his violent self at this stage. Is imposing goodness through violence and torture an effective and reasonable way to solve the problem of crime? Are we not creating robots by trying to change someone's inner nature and make them act automatically? All these questions haunt the reader who has to look for solutions within himself/herself. Once again, this fear of misused technology is present and the author is perfectly aware of it. Moreover, he himself insists on the fact that "novel and film [Stanley Kubrick's adaptation of

the novel in 1971] were meant to show that the treatment was worse than the crimes [...]" (Krämer, 2011:xviii). This statement may seem logical to some readers or exaggerated to others. Yet, it is true that the treatment can be seen as disproportionate to the crimes committed by Alex if one keeps in mind that the cure leaves him deprived of his free will, unable to make choices and "unable to defend himself" (Krämer, 2011:xviii) from the world's violence. All that, if the reader forgets his cruelty and insensitivity, is taken away from the young Alex and a glaring example is, as it has already been established, music. Alex is, for all his vices, a lover of classical music (Mozart, Bach...) and above all of Beethoven, whom he affectionately calls his "Ludwig Van" (Burgess, 2013:124).[4] This musical fascination is what makes him a human being capable of passion and sensitive to art, aesthetics and beauty. It is this part of his humanity that will be taken away from him. Indeed, music, notably that of Beethoven, is used as an accompaniment to the atrocious films that Alex has to watch in order to be cured which is going to be a shock to him:

> 'That,' I said, very sick. 'Using Ludwig van like that. He did no harm to anyone. Beethoven just wrote music.'
>
> […]
>
> 'Music,' said Dr Brodsky, like musing. 'So you're keen on music. I know nothing about it myself. It's a useful emotional heightener, that's all I know […]. Here's the punishment element, perhaps. The Governor ought to be pleased'.
>
> (Burgess, 2013:124-125)

Hence, the criminal is dehumanised for the stake of being good. Deprived of his passion, his free will and any possibility of defending himself in case of revenge, he finds no other solution than suicide – an attempt at which he will fail.

Beyond the music, readers must also realise that "[t]he space between knowing the good and doing the good is a region entirely inhabited by freedom. [...] Without the freedom to fall, good cannot be a choice" (Harris, 2011:104). Although Alex initially volunteers to undergo the treatment, nothing is explained to him. The process and what exactly it consists of is only revealed to him once he experiences it. From then on, he is left with no choice or freedom of

[4] His love of classical music is such that he turns against his own droogs and is violent with them when they do not respect this art: "[…] I knew what she sang. It was an opera by Friedrich Gitterfenster called *Das Bettzeug* […]. Anyway, I shivered. But old Dim […] let off one of his vulgarities […] I felt myself all of a fever and like drowning in redhot blood, slooshying [hearing] and viddying [seeing] Dim's vulgarity, and I said: 'Bastard. Filthy drooling mannerless bastard. Then I […] fisted Dim skorry [fast] on the rot [mouth]" (Burgess, 2013:33-34).

choice to stop the process when it becomes unbearable for him. Moreover, the process cannot function properly "when the attenuation [or here the annihilation] of the emotion [or impulses] is itself a motivated action" (Douglas, 2008:232). The fact that the government is motivated by its upcoming re-election and a desire to completely eradicate crime, also that Alex was initially motivated by a desire to get out of prison faster in order to continue his misdeeds, are two questionable motivations on the part of both parties involved that seem to doom the cure to failure. Alex's suicide attempt and the media storm it will create, turning him into a martyr victim of the government, will further emphasise this idea that the cure is worse than the crimes in this case. Taking away someone's free will and therefore their humanity seems to be the limit that no human being or government should go beyond, no matter what. Human nature cannot be transformed without dire consequences – the death of Humanity as a whole. Once again, human nature is brought back to the heart of the debate and provokes many worries about its future. Burgess thus perfectly depicted the atmosphere of the 20th century's post-war years through his consideration of technology in his novel. As Mark Greif argues, if humans are the heart of the problem in the 20th century, the only solution is to improve or transform them, while doubting that the outcome of this manoeuvre will still be human. As explained by Greif, "[t]he crisis of man discussions of technics has suggested that he was turning his techniques on human nature" (2015:63). The solution would then be to use technology on the human being to change its nature. What Greif means by this is then left to the reader's interpretation. Does he see the future of the human being in a hybrid being half-man, half-machine? Or does it imply that the solution to the human problem lies in the proper use of human technology by its creator? The answer is in the reader's hands.

Eventually, already through two elements which are violence and technology, it is possible to perceive how Burgess punctuates his novel with a series of reflections that are specific to his time and, in consequence, how he is influenced by his society, its events and its developments. Thanks to these two aspects that are crucial in *A Clockwork Orange*, it is possible to observe that many sociological features are present alongside the (auto)biographical elements scattered throughout Burgess' work. However, beyond the private and sociological contexts, another influence can be noted: that of the literary context of the time.

### *The 20th century's dystopian turn*

In order to interpret Burgess' novel, a literary approach can also be a useful tool since it is possible to detect what can be called a dystopian character of *A Clockwork Orange*.

The 20th century is also known as the century of the dystopian genre. Already present in the 19th century with novels such as Mary Shelley's *Frankenstein* (1818) and H.G. Wells' *The Time Machine* (1895), the word dystopia first appeared in a political speech by J.S. Mill in Ireland.[5] Used at the time to contrast with the term utopia, which already existed since the 16th century and referring to an ideal society, dystopia is consequently used to refer to a society that is the opposite of perfect or even nightmarish. As J. Pospíšil points out in his doctoral thesis, "[m]any of such novels [dystopian ones] have been written in the periods of great pessimism which are epitomized by wars, power abuse, tyranny and any other happenings" (2016:7). Therefore, it is not surprising that the dystopian trend flourished throughout the 20th century and especially in the decades of the post-war period. The two World Wars, totalitarian regimes, technological developments, the Cold War... all triggered the writing of dystopian novels such as *Brave New World* (1932) by Aldous Huxley and *1984* (1948) by George Orwell. These two authors, previously mentioned in this work, are two testimonial authors of the dystopian flourishing in the 20th century. The former dealing with a political dystopia embodying the dread of totalitarian regimes and the latter highlighting the fear of capitalism, industrial progress but also technological progress, both authors, influenced by the atmosphere and events of their century, were a source of inspiration for Burgess:

> For the moment, I have to record that I have been derided and rebuked for expressing my fears of the power of the modern state—whether it be Russia, China, or what we may term Anglo-America—to reduce the freedom of the individual. Literature has warned of this power, books like Aldous Huxley's "Brave New World" and George Orwell's "1984," but "sensible" people, not much moved by imaginative writing, are always telling us that we have little to worry about.
>
> (Burgess, 2012:5)

[5] Pospíšil, Jan. *The Historical Development of Dystopian Literature*. Univerzita Palackého v olomouci, faculty of arts, PhD dissertation. Oct. 2016. Theses.cz, p. 9 https://theses.cz/id/dlhyhf/Dystopia_Pospisil.pdf

This influence has already been mentioned, especially with regard to Orwell, in this research. However, many elements of *A Clockwork Orange* echo the two novels mentioned above.

As far as Huxley and *Brave New World* are concerned, the most striking common element is undoubtedly the use of drugs but also of technology that is made. Indeed, in Burgess' novel, the protagonist is tortured using a technique combining drugs and technology while in Huxley's, the futuristic and ultra-capitalist society that is depicted is based on the use of drugs (Soma) and high-tech objects (helicopter car, etc.) to give citizens the illusion that they are happy. In addition, the protagonist of *A Clockwork Orange* is also fond of drugs because he drinks, to stimulate himself during his nights filled with criminal activity, a "milk-plus" (Burgess, 2013, 7) which is nothing but modified milk using drugs.

The Orwellian influence can be noticed in elements already highlighted such as the language invented by Burgess and the torture that Alex undergoes during Ludovico's technique. Indeed, the power of language had already been dealt with by Orwell who suggested, in his *1984* novel, a futuristic and totalitarian world where the government controls and restricts the language spoken – a whole language called 'Newspeak' is even created – by citizens in order to control their thoughts but also the way they see the world and thus subject them to totalitarian power. As for torture, it is also present in Orwell's novel where Winston, the protagonist, is tortured with the help of a device that puts him physically in front of his greatest fear, rats, in order to brainwash him and make him adhere to the totalitarian doctrine of the government in power. It is therefore easy to see a parallel made by Burgess that set up a brainwashing torture to make Alex, a criminal, good and thus submit him to the wishes of the society and the government in place. Furthermore, it seems that torture is an element that has had a strong impact on all three authors, since Huxley also puts forward a method of torture at the beginning of his novel. In fact, the new-borns, almost mass-produced and born through a sort of assembly-line without any real family, are programmed with the help of an electroshocks-based method of torture to dislike everything related to aesthetics, art and beauty considered as useless passions that do not bring money or benefits to society.

Both the Orwellian and Huxleyian influences prove that Burgess wanted to follow the same dystopian path as them. Anthony Burgess also recognised that both novels were warnings. As Sargent quoted by Pospíšil argues, a dystopia is defined "as a non-existent society described in considerable detail and normally located in time and space that the author intended a contemporary reader to view as considerably worse than the society in which the reader lived" (2016:11). Dystopia, although inspired by the present, is indeed a warning about the future. Not

always a criticism, this warning is orientated at the reader and informs them on how the world in which they live could develop into if the deficiencies of the present system were not solved. Orwell's, Huxley's and Burgess' novels could then be described as prophetic dystopias according to Pospíšil's criteria: "they are mostly indicated [...] to take place in the future [...], they must have some relevance to the present [...], the effect on its reader must be that of a warning" (2016:13). These criteria are met by Burgess' novel, which offers readers a futuristic London that looks very much like, apart from a few differences, the London in which the book was published, with a warning effect, as has been demonstrated with the concept of maieutic, on the reader.

Although the influence of major dystopian works is already an interesting lead, many other dystopian elements of *A Clockwork Orange* can be pointed out to demonstrate how the novel can be read as a dystopia. A few of these features were highlighted by Samantha Moya in her essay "A Clockwork Orange: The Intersection Between a Dystopia and Human Nature" (2011). Two of the characteristics of dystopian societies noted by Moya are "the lack of moral choice" and "the priorization of social control and efficiency over human nature" (Moya, 2011:1). It is, indeed, no longer necessary to repeat that Burgess' novel features a real encroachment of society, of the government on free will of the individual. In order to create a perfect society, a so-called utopia, the government decides to impose goodness and benevolence on a human being to the point of taking away what makes human. This conundrum is what differentiates utopias from dystopias according to Moya: "Dystopias are mainly distinguished from utopias because they do not operate on free will. Citizens are not aware of options. Utopias, while imprinting certain beliefs on their followers, still act on a level of consciousness" (2011:2). This is exactly what happens in Burgess' novel. Social control comes first and the fight against crime is more important than the recognition of the individual. Alex who "may be a criminal" (Moya, 2011:4) and "may be immoral [...] is nevertheless an individual" (Moya, 2011:4). Yet, the government decides to turn him into a clockwork orange by depriving him of his juice, his essence, his free will. And Alex is aware of this: "Me, me, me. How about me? Where do I come into all this? Am I just some animal or dog? [...] Am I just to be like a clockwork orange?" (Burgess, 2013:138). Faced with the manipulation to which he is subjected to on all sides, Alex realises that he is being turned into an automaton in the name of goodness. Nothing but goodness: the government wants nothing else. Nevertheless, what "many governments will fail to recognize […] is that suffering and happiness are symbiotic. One

cannot exist without the other, and one cannot be human without the ability to choose between good and evil" (Moya, 2011:4).

As argued by Moya, the government in *A Clockwork Orange* is one of them. Many experts, such as Moya and Rabinovitz, agree that things are never one-sided but always more complex than they appear. "[...] [T]hough one would like to live by a single set of values, reality is most often apprehended in sets of opposing values like good and evil, white and black, rich and poor" (Rabinovitz, 1978-79:541) and it is even more complex because these opposites are themselves the two poles of an axis along which intermediate positions can be taken. This is also what proves that Alex is living in a dystopia: not only is a set of values forced on him by imposing one pole, goodness, and forcing him to completely forget the other pole, badness, but, in addition, he is confined to a unicoloured overview of a world that is multicoloured on all sides. Indeed, after the cure, Alex can no longer stand violence in any form but he soon realises that the world around him is violent. Goodness alone cannot define the society he lives in. One can be more or less good, more or less bad, but not only one or the other. The manichean vision that is attempted to be attributed to Alex is a kind of utopian vision that, misused, becomes the vicious tool of a nightmarish world. Margaret Atwood, famous author of dystopian novels, has created a concept for this dystopia/utopia mix: "Ustopia". She defines this term as follows: "Ustopia is a world I made up by combining utopia and dystopia – the imagined perfect society and its opposite – because, in my view, each contains a latent version of the other" (Atwood, 2011). Nothing is simple, everything is complex. A man is a complex organism that cannot only be good or bad. All good things contain bad things and all bad things contain good things just as utopias contain dystopian elements and dystopias contain utopian elements. It is impossible to please everyone: to please a majority of the population is completely plausible, as in a democracy, but please all the citizens is not possible. So a utopia is always imposed on someone and that is a dystopian aspect. In contrast, a dystopia is always based on someone's societal ideal. Even if this ideal is imposed, it corresponds to someone's dream, someone's utopia. In fact, it is this vision of the world that Burgess wanted to convey to his reader and that makes his novel a dystopia or rather an 'ustopia'. A society is never a complete nightmare or an utter dream but always a balance between both. In this case, this is the reader's role to perceive good and bad elements and to find balance.

In conclusion, influenced by the great names of the dystopian genre, Burgess himself wrote a novel that can be described or read as a dystopia. Yet the message he wants to leave is not that of a society to be completely avoided: Burgess' message is rather a message of balance

that the human being must find with regard to his connection with his environment but also in his own nature. The three elements, autobiographical, sociological and literary, analysed above made the relevance of Burgess' novel in the 60's apparent since, influenced by the century he lived in and by all the events that characterised it (wars, technological progress, totalitarianism and dystopian turn), he offered a complex world view so that this reader does not forget that human nature is neither purely good nor purely evil, but only complex. To want to change it is a perilous project that must be handled with care. All the questions that this project can generate are questions that have punctuated the intellectual and civic life of the 20th century and especially the post-war period as well as the writing of Anthony Burgess, making him an author of his time.

So, even without knowing it, Burgess was already positioning himself according to a concept that would only see the light in the 1980's: posthumanism. Indeed, representing a discussion about the future of the human being or/and its disappearance, this discourse has as a basis all the reflections, interrogations and fears about human nature that can be detected in *A Clockwork Orange*. Yet, to fully understand what it truly entails for the book of Burgess, a question remains to be asked: What is posthumanism?

## The posthuman turn

As demonstrated in the first part of this research, numerous perspectives can be used to analyse Anthony Burgess' novel. Indeed, experts such as Krämer, Aggeler and Rabinovitz have investigated the biographical influence, which means the influence of the author's own life, on his work, stating, among other things, that themes such as violence, war, religion and music were very important for Anthony Burgess and thus became inspirations for his novel. Other experts such as Morris, Greif, Bryfonski and others agree that the period in which Anthony Burgess wrote and published his book (the post-war period in the 1950s and 60s) also played an important role in the subjects discussed by the author and the way in which they were presented in the fiction. Finally, some experts, such as Samantha Moya, have focused instead on the dystopian hints in Burgess' novel. The dystopian turn having occurred during the 20th century, the dystopian characteristics, for example the prioritisation of the common good over the individual, demonstrate that *A Clockwork Orange* can be read as a dystopia. All these angles of reading put forward by different experts make it possible to outline that the potential interpretations for the novel studied are inexhaustible, although each one more interesting than the others.

Through the position of a 21st century reader of Burgess' work, the questions to be formulated are numerous: what new interpretations can be made of the novel nowadays? What elements might attract the attention of a 21st century reader that would not have done so in the 1960s? What tools can be used to develop a new reading and what conclusions or messages can be drawn? All these questions are driving forces for the reading of *A Clockwork Orange* that follows.

In order to carry out this reading, it is necessary to discern what is at the heart of society nowadays and especially at the heart of its citizens' life on a daily basis. In view of the many industrial and technological developments that increasingly influence human life today in a deeply capitalist world, it is difficult to miss all the questionings around human nature that populate, for example, contemporary literature. As already mentioned, these questionings are not new but are increasingly relevant in a world where alienation is becoming ever more profound. As highlighted by Georges Zimra in his article "Is there a machine behind the machine" [free translation] (2020) [6], things have evolved to the point where "in the hyper-

[6] Zimra, Georges. "Y a-t-il une machine derrière la machine?". ERES - Connexions Vol. 1, No. 97, pp. 41-54 Web. 17 Oct. 2020. Cairn.info, https://www.cairn.info/revue-connexions-2012-1-page-41.htm .

modern society, [...] only the market gives value to people and things" [free translation] (51)[7]. A human being is no longer seen as a being but as a machine which, like all machines, can be improved to always go faster, to always go further, to be more and more efficient and profitable in a society where the laws of supply and demand are king. This alienation, already palpable in the 1960s when Anthony Burgess' novel was published, was one of the sources of Mark Greif's concept of 'Crisis of Man'. All the questions about the true nature of humans in a post-war society are still relevant today, but naturally take on a much more specific dimension in the light of multiplying prostheses, new nanotechnologies, artificial intelligences and robotic life forms that are constantly emerging nowadays. The reflection is progressively expanding, and some experts such as Mark Hunyadi even go so far as to defend the idea that we have reached the point where the human being is now "a being conditioned by all the cultural and artificial productions that it itself has created" [free translation] (2016:1)[8]. In other words, human nature is no longer more than a condition and humanity no longer defines what it means to be human but it is all humans' creations that took over this function.

In consequence, humans adapt to their own creation and come to "reduce life to a technical problem" [free translation] (Hunyadi, 2020:10)[9]. As soon as a problem emerges, for example illness, senescence or loss of a body part, the solution is found in artificial technology created by humans. This was already the case in *A Clockwork Orange*, where technology is used as a solution, which turns out to be only temporary, to annihilate Alex's murderous impulses. Based on the combination of a vomit-inducing drug and the viewing of ultraviolent films, Ludovico's technique is partly based on what is known as moral or behaviour enhancement, that is to say a process aimed at making an individual "more virtuous, more praiseworthy, more capable of moral responsibility" (Douglas, 2008:229) or even to make him/her "act or behave more morally" (Douglas, 2008:229) by any means possible. This can be done in a gentle way such as education and the media, or more violently by using technology and going as far as torture as is the case for Alex in *A Clockwork Orange*. All this is done in order to change the protagonist's behaviour and make him morally compatible with society. Whether the soft or the hard way is used, in both cases "it highlights the centrality of both human curiosity and our passion for self-improvement to our decisions about, and hopes for, the future of humanity" (Harris, 2011:103). As a result, lying at the very heart of the novel, it

[7] " Dans une société hyper moderne, […] seul le marché donne une valeur aux hommes et aux choses" (Zimra, 2020 :51).
[8] " […] un être conditionné par toutes les productions culturelles et artificielles qu'il a lui-même créées" (Hunyadi, 2020 :1).
[9]" […] réduire la vie à un problème technique" (Hunyadi, 2020 :10).

is particularly interesting to try to find new potential interpretations of Burgess' novel based on today's perspective on the relationship between humans and technology.

One of the most recent concepts that can be highlighted to characterise this human/technology relationship is posthumanism, and it is indeed on a posthuman vision that the following research will be based. The concept becoming increasingly important in 21st century society, it is perilous to talk about technology and all that is related to it these days without talking about 'posthumanism' and 'posthuman'. What is posthumanism? What are its characteristics, its evolutions, its challenges? And how can all this be applied to the novel under consideration? These are some of the tracks that will be explored in order to carry out a reading of *A Clockwork Orange* through the light of what can be called the posthuman turn.

### *Posthumanism: overview of a debated concept*

Before embarking on a posthuman reading of *A Clockwork Orange*, a terminological and historical clarification of the term is necessary. For some, it may seems simple to define the concept by breaking it down into two elements: 'post-' meaning after and '-humanism' meaning "any system of thought or action which is concerned with merely human interests [...], or with those of the human race in general"[10]. Following this line of reasoning, posthumanism would simply be a current of thought that would consider things beyond the human or what might be after the human. However, it is far from being that simple and by deconstructing the word in this way, many nuances attached to posthumanism are lost.

In fact, posthumanism is neither a current of thought to which many members have adhered simultaneously and consciously, nor even a univocal line of thought. On the contrary, posthumanism is a problematic concept that has fuelled heated debates and has divided experts when it came to providing it with a definition. In addition, it is all the more complex to define a concept whose exact date of emergence is unknown. It is necessary to keep in mind that posthumanism is not the result of a single person, a mentor, who wished to claim to be a posthumanist and wanted to bring together experts and scholars with the same opinions. The term posthumanism has only been applied afterwards to certain phenomena, to certain people or groups of people and/or to certain works dealing with relatively diverse subjects. In fact, despite the flourishing that posthumanism has known especially in the field of literature for some decades now, "discussions on humankind's nature, future and relationship with

[10] Definition extracted from the Oxford English Dictionary (Website), https://www.oed.com/oed2/00109097 .

technology may have started a few decades or centuries ago (depending on the scholar's opinion, perspective and field of expertise)" (Guesse, 2020:9). Many scholars believe indeed that posthumanism predates the first use of the word in *Paracriticisms: Seven Speculations of the Times* by Ihab Hassan in 1974. The author of this book was in fact the one who coined the term posthumanism for the specific purpose of describing an era in which "the human form [...] may be changing radically, and thus must be revised" (quoted in Dow, Suzanne and Wright, Colin, 2010:299). It was already a question of revising how to define and characterise the human being and its nature in the face of an ever-changing world. Nevertheless, even if this first occurrence could have served as a milestone designating the birth of posthumanism, a large majority of experts agree that posthuman ideas were already present prior to the word used to designate them. A large number of scholars believe that posthumanism is a later step on the current of thought that preceded it in the years 1950-60s entitled transhumanism. Intellectuals such as Franck Damour, David Doat and Gilbert Hottois fall into this line of thought. For them, posthumanism necessarily lies in the continuation of the technological utopia that transhumanism represents, as defined by the Oxford Dictionary: "The belief or theory that the human species can exceed its current physical and mental limits through the development of science and technology" (quoted in Damour, 2018:11). According to these experts, the theorisation of posthumanism could only have taken place thanks to the foundations laid by transhumanism which, therefore, is based on technology and its use to improve human beings by ensuring that they surpass their human condition and limits (mortality, disease, senescence...).

As with posthumanism, it is difficult to attribute the appearance of the transhumanist concept in a precise manner to a founding father and a precise moment. As the works of F. Damour and D. Doat, *Transhumanism, what future for humanity?* [free translation] (2018) [11] and G. Hottois, J.-N. Missa and L. Perbal, *The Human and its Prefixes – Encyclopedia of transhumanism and posthumanism* [free translation] (2015) [12] outline, trying to retrace the history and evolution of transhumanist and posthumanist discourses is like trying to navigate through an ocean of texts and scholars each attempting to make their own contribution. Many people have obviously aspired to make their mark by creating manifestos, such as the *Transhuman Manifesto* by Natasha Vita-More in 1983, or declarations, such as "The

[11] Damour Franck and Doat David. *Transhumanisme : quel avenir pour l'humanité ?* Paris : Le Cavalier Bleu, 2018. Cairn.info.
[12] Hottois Gilbert, Missa Jean-Noël and Perbal Laurence, eds. *L'Humain et ses préfixes. Une encyclopédie du tranhumanisme et du posthumanisme.* Paris : Vrin, 2015.

Transhumanist Declaration" by Nick Bostrom and David Pearce, founders of the World Transhumanist Association (WTA) in 1998, which only had one result: to make things even more complex. Certain scholars such as Carole Guesse even argue that despite the fact that some people point to biologist Julian Huxley, brother of the famous writer Aldous Huxley, as the creator of the term transhumanism in 1957, the debate over authorship has continued to be a problem. Within the movement itself, the vindications are numerous with one more plausible than the other. Nevertheless, what prevails here is the fact that these lines of transhumanists, father of the concept or not, has left the foundations for the theorisation and understanding of posthumanism.

In fact, the many experts who have chosen to link posthumanism to transhumanism are almost unanimous in their view that both concepts are technological utopias "glorifying the expansion of scientific knowledge and its achievement, [...] and the exceptionalism of the human species as the only one possessing self-awareness" (Guesse, 2020:16). These technophiles are often great adepts of what can be called technopia, which is defined as "referring to a perfectly sophisticated, technicised, supratechnological, cybertechnological, high-tech society, a vision of Human performing to the point of modifying its own flesh [...]" [free translation] (Chanvallon, 2010:159)[13]. Considering this way of reasoning, the argument most used to defend technology, its use and its ever-increasing development, is that "[o]n a rudimentary level, the engineering of humanity is as old as humanity" (Guesse, 2020:19). This argument is then based on the fact that the prehistoric human seeking to create spears, baskets and other tools for itself was already engaged in the kind of human enhancement that characterises today's trans/post-humanist discourses. As a matter of fact, as soon as a being capable of making tools to improve its environment, its way of life and even its body, called *homo faber*[14], was born, humans started to be part of a posthuman trend. Here, the posthuman trend has to be understood as the demonstration of a human desire to go beyond the limits imposed to it by nature and to improve itself. Therefore, it is quite relevant to highlight that "human enhancement as a process of improvement carried out by humankind [has existed] since time immemorial" (Guesse, 2020:19). Wanting to go beyond the natural capacities of the naked human, that is to say the human without any tools than its limbs, is then to be considered as the beginnings of posthumanism, which makes it take root from the use of flint and medicinal herbs

[13] " […] renvoyant à une société parfaitement sophistiquée, technicisée, supratechnologique, cybertechnologique, high-tech, vision de l'Homme performant jusque dans la modification de sa propre chair [...]" (Chanvallon, 2010 :159).
[14]Zimra, Georges. "Y a-t-il une machine derrière la machine?". *ERES - Connexions* Vol. 1, No. 97, p. 49.

and then associates it with glasses, shoes, "birth control pills and genetic engineering [which] are all human enhancement technologies of varying degrees of complexity" (Guesse, 2020:19).

Subsequently, the development of this posthuman trend would have constantly pushed human beings to surpass themselves until the invention, centuries later, of mechanical clones of animals and soon even human beings called automata which are "moving mechanical devices in the shape of a person"[15]. As a consequence, today's transhumanists and posthumanists do not have to be considered as the first to be interested in technology, automata and other machines. Relatively quickly in its history, the human being, having "built a world with the tool, the machine, the language," (Zimra, 2012:41), wanted to go even further until it became interested in the bodies of animals – considered sometimes as machines, sometimes as living beings – and then in its own body. Seeking to understand its mechanism and to reproduce it as if it were a machine, humans have never ceased to want to understand "the wonder [...] of the machine" (Zimra, 2012:41) that they were in their own eyes. To name but a few, René Descartes (1596 - 1650), Julien Offray de La Mettrie (1709 - 1751) and Jacques Vaucanson (1709 - 1782) are among the many scientists and philosophers, particularly from the European Enlightenment onwards, who have never ceased to want to uncover the human body and its mysteries. Notwithstanding this growing interest, dissecting, creating automatons, developing moving machines are only the starting point of a grandiose evolution that has known and still knows this desire of surpassing oneself proper to the human being.

However, this prehistoric origin of trans- and post-humanist tendencies is nowhere near from being unanimous among experts, but it does have the advantage of defending the idea that technological development is natural for humans and should even be considered as a duty, a priority for many transhumanists. Some of the great names of transhumanism, such as Max More, have even insisted that transhumanism should become a "philosophy of life" (cited in Guesse, 2020:41) aiming, in the long term, at a final stage that would be what he calls the posthuman, and in relation to which today's humans would all already be transhumans, understood as humans in transition to a being, human or not, that would surpass them in every respect.

On the other hand, some scholars, such as Ranisch and Sorgner, have categorically rejected this idea and even called it "the transgression of man's biological boundaries by means of technology" (quoted in Guesse, 2020:17). Other scholars such as Rosi Braidotti, whose theory will be analysed in more detail later in this section, also reject this view of technology

[15] Definition extracted from the Oxford Learner's Dictionary (Website), https://www.oxfordlearnersdictionaries.com/definition/english/automaton.

and its use on humans as something quite natural. It will be seen that Braidotti does not see the use of technology on humans for the purpose of improving them as a real transgression but rather as a misuse of technology. In fact, Braidotti, unlike Ranisch and Sorgner, rather seeks to defend the use of technology for the purpose of reconnecting with nature and the environment, and not for the purpose of further detaching humans from it until they become unnatural, mechanical beings. Nonetheless, whether it is perceived as a transgression, a utopia or a simple human desire, the importance here lies in the fact that this way of thinking about technology will lead transhumanists to the concept of the posthuman. This concept will be for them "an entirely new concept of the human" (Esfandiary quoted in Guesse, 2020:23) which is then seen in its potential hybridity with technology and machines. Some, like Donna Haraway, even called this posthuman a cyborg that she defines in her book *Simians, Cyborgs and Women: The reinvention of Nature* (1991) as "cybernetic organism" (149) or "a hybrid of machine and organism" (149) which means an innovative mix between a human being and a technological machine (mechanical limbs, mechanical organs or other). These transhumanists, convinced that technology is a natural part of human's evolution, can clearly be perceived by many as technophiles who truly appreciate technology and the possibilities it can offer them.

Unfortunately, these technophiles (transhumanists) will very quickly be caught up by moral and ethical considerations that they had often left aside because of their enthusiasm. At the end of the 20th century, "a growing portion of the transhumanist works has been adopting a more critical perspective upon human enhancement, and even transhumanism itself" (Guesse, 2020:56). One reason for this is that, at that time, and still today, the idea of human's natural perfectibility has pushed it to create increasingly elaborate machines and robots that, through their efficiency, undermine the value of the human being itself. Competing with their own creations' performance, humans have been forced to adapt to "a machine environment" [free translation] (Hunyadi, 2016:1)[16] that has quickly outpaced them in some respects. Another reason is also that "thinkers, writers and scholars have likely been inspired by a wider cultural mind-set resulting from Post-WWII scientific-technical revolution, from the 1940's to the 1970's" (Guesse, 2020:81). This means that the use made of technology, as already mentioned in the first part of this research, during the 20th century and especially during the war had a strong impact on the enthusiasm that prevailed among many transhumanist technophiles of the time. As Hassan pointed out in 1973 when the word posthumanism was coined, but also Mark Greif in his analysis of the 'Crisis of Man', many ethical questions that had previously seemed

[16] "[…] un milieu de machines" (Hunyadi, 2016 :1).

irrelevant to technology and its consequences began to arise. However, war is not the only cause of this.

From the 1960's onwards, globalisation, capiptalism and the creation of the internet also set in motion a "boundless circulation of ideas" (Guesse, 2020:148) and goods that put the technical capabilities of machines on a pedestal compared to human's. Human creations very quickly replaced their creator in mass industries for questions of profitability, in everyday life for questions of speed and in the world of exact sciences for questions of precision. Increasingly losing their identity because of a creation sometimes arising too perfect, humans find themselves alienated from "this robotic furnishing of our world" [free translation] (Hunyadi, 2016:5)[17]. This phenomenon echoes Hartmut Rosa's previously defined concept of "social acceleration" (2015): the world is moving too fast and human beings, no longer able to keep up, are losing their identity.[18] And this situation has only become more acute in the light of advances in nanotechnology, telecommunications techniques and artificial intelligence. From now on, certain behaviours and lifestyles that depend on machines with which we have learned to live and on which we are increasingly dependent are expected of human beings. Household robots, computers, mobile phones... demand more and more responsiveness and availability from their creators who can no longer keep up. Technology nowadays no longer improves lifestyle but has itself become a way of life forced upon humans. As Mark Hunyadi made clear in his 2016 article, echoing Rosa's theory of a social acceleration: "[M]achines and robots are pending to populate our daily lives, to modify and shape our behavioural patterns, and to impose on us a way of life that we have not chosen" [free translation] (7)[19]. It is in the face of this "diagnosis of our times" [free translation] (Hunyadi, 2016:2)[20] that transhumanism, especially since the 1980's but more sporadically since the 1960's, seemed to be approaching or subdividing into another more critical and ethical stream of thought regarding the use of technology on humans: "These remarks might echo the will for these transhumanists to convey less anthropocentric views on the enhancing potential of technology, bringing critical transhumanism one step closer to another set of critical discourses prompted by the possible existence of posthumans: posthumanism" (Guesse, 2020:61). Aware of the lack of ethical considerations in the majority of transhumanist works and projects, many experts are therefore

[17] "[…] cet ameublement robotique de notre monde" (Hunyadi, 2016 :5).
[18] Rosa, Hartmut. "Why are we stuck behind the social acceleration?". YouTube, uploaded by TEDx Talks, 2015, https://youtu.be/7uG9OFGId3A

[19] "[…] machines et robots en viennent à peupler notre quotidien, à modifier et à façonner nos habitudes de comportement et à nous imposer un mode de vie que nous n'avons pas choisi" (Hunyadi, 2016 :7).
[20] "[…] un diagnostic d'époque […]" (Hunyadi, 2016 :2).

increasingly questioning the validity of the ideas that advocate technology above all else, whether it be humans, their environment or other living beings. In consequence, posthumanism unfolded on this growing ethical and critical ground which became more and more widespread.

### *Critical/Biological posthumanism: an ecological and ethical perspective?*

> "[…] I call modernity talk: "Everything before us was old and naïve and uncomplicated, now everything is new and self-reflexive and complex"
>
> (Timothy Morton, 2012:63)

As demonstrated above, posthumanism seems to have emerged in a conscious and tangible way in the minds of some scientists who were previously transhumanists. However, this does not prevent other transhumanist members from remaining convinced that technology and its use can only be positive because it is an integral part of human evolution. From this finding, two branches of posthumanism seemed to have emerged in parallel as Gilbert Hottois explains in the introduction of his book *The Human and its Prefixes – Encyclopedia of transhumanism and posthumanism* [free translation] (2015)[21]:

> The first is more a continuation of Transhumanism, that is, the biophysical transformation of the human being […]. This first orientation raises the question of the erasure of the boundaries separating traditionally distinct and even opposing notions and realities: natural-artificial, living-technical-inert, man-machine… […] it proceeds by transforming the human being [free translation].
>
> (Hottois, 2015:9)[22]

This first subdivision of posthumanism is therefore represented by scientists as always seeking to use technology in order to surpass the human condition but more ethically framed.

[21] Hottois Gilbert, Missa Jean-Noël and Perbal Laurence, eds. *L'Humain et ses préfixes. Une encyclopédie du tranhumanisme et du posthumanisme.* Paris : Vrin, 2015.

[22] "La première se situe davantage dans le prolongement du Transhumanisme, c'est-à-dire de la transformation biophysique de l'être humain […]. Cette première orientation soulève la question de l'effacement des frontières séparant des notions et réalités traditionnellement distinctes et même opposées: naturel-artificiel, vivant-technique-inerte, homme-machine… […] elle procède par transformation de l'être humain" (Hottois, 2015 :9).

> The second orientation is "external" because it does not go through such a transformation. It extrapolates from research in the fields of robotics, artificial intelligence (AI), synthetic biology, artificial life forms, etc. Products conceived or not as instruments in the service of the Man could know abruptly and insensibly an autonomous evolution leading to becoming more and more independent, foreign to the Man, possibly to replace it [free translation].
>
> (Hottois, 2015:9)[23]

This second branch of posthumanism is therefore characterised by a focus on a posthuman being who would be a creation of the human being, probably a machine, taking its independence and surpassing its creator, taking risk of eliminating it. The two branches highlighted here remain integral parts of what can be called technological posthumanism which means a posthumanism that still relies on the use of technology and technological devices that seem to be destined to surpass human beings one day. The focus here is on a 'post-humanism' that clearly considers a world 'after the human being' (disappeared or improved to the point of no longer being human).

Faced with the come about of these two branches of posthumanism, it is possible to understand that transhumanism and posthumanism have in common a particular interest in technology and the future prospects, or not, that it can offer to human beings. In consequence, it is a possibility to label posthumanism, even if a definitive and exhaustive definition is impossible, as "a discourse [that] suggests an episteme which comes 'after' humanism ('post-humanism') or even after the human itself ('post-human-ism') […] affecting […] the notion and nature of the human as fact and idea" (Schmeink, 2016:34). The heart of posthumanism, as it has also been for transhumanism, is therefore always the human being and the future that awaits it with the technology it itself developed. As seen before, this perspective initially induced real enthusiasm within transhumanism. Technology was celebrated and held out great promise for the future of human beings. However, as a more critical and ethical side of posthumanism emerged, another feeling came to compete with the initial enthusiasm of technophile transhumanists: fear. The ever more rapid and elaborate advance of technology quickly made some technophiles aware that if technology allowed them to push back the natural limits imposed on them, such as disease or old age, they also realised that technology could be synonymous with the end of its own creator and therefore of humanity. Picked up, among others, by psychoanalysis under the names "celebratory posthumanism" (Flieger, 2010:358)

[23] "La seconde orientation est « externe » car elle ne passe pas par une telle transformation. Elle extrapole à partir des recherches et inventions dans les domaines de la robotique, de l'intelligence artificielle (IA), de la biologie de synthèse, des formes de vie artificielles… Des produits conçus ou non comme autant d'instruments au service de l'Homme pourraient connaître brusquement et insensiblement une évolution autonome conduisant à se rendre de plus en plus indépendants, étrangers à l'homme, voir à s'y substituer" (Hottois, 2015 :9).

and "doomsday posthumanism" (Flieger, 2010:355), these two tendencies of posthumanism soon created heated debates about the good or bad nature of human technology and its use. Supporters of doomsday posthumanism were quickly won over by what psychoanalysts call "the sky-is-falling paranoia" (Flieger, 2010:372) and saw only the apocalypse that awaited human beings, who never stopped wanting to go further, not only in the creation of automatons, robots, etc., but also in the improvement of the human body, represented in particular by cyborgs. The feeling of fear in the face of technology slowly but surely reaching such a point of elaboration that the creation would surpass the creator was particularly rapidly met in dystopian and science fiction literature that is to say in a rather popular current. This sense of fear is thus clearly to be associated with technological posthumanism and its reliance on technological devices, to such an extent that it takes up too much space in human beings' lives.

Nevertheless, it is crucial to realise that fear and enthusiasm are not the only two emotional reactions engendered by technology. Some thinkers, writers or scholars have decided to focus on another feeling that can fill the gap between the two poles that are fear and enthusiasm: hope. What is interesting is that this hope can emerge from the same definition given above but with a different emphasis put this time on the term humanism which appears in post-humanism. Indeed, since the beginning of the 21st century, a new branch of posthumanism, in addition to the first two already highlighted, has flourished. Called 'Critical Posthumanism' (Dow and Wright, 2010:302), this branch can be defined, as Catherine Wadby proposes, as "a general critical space in which the techno-cultural forces that produce and undermine the stability of the categories 'human' and 'non-human' can be studied" (quoted in Dow and Wright, 2010:302). Influenced by disciplines and currents such as post-structuralist anti-humanism, feminism, critical race theory and others, critical posthumanism has been explored by names such as Cary Wolfe and Rosi Braidotti. These scholars see everything in a new light: in the face of the ecological upheavals of the 21st century, they see:

> […] [S]cience and technology not as mere instruments of change in the hands of human agents, but rather as part of a much wider and more complex cultural shift traversing also humanities and arts wherein the subject is re-conceived as ever more decentred.
>
> (Dow and Wright, 2010:301)

Braidotti and Wolfe, among other scholars, see posthumanism not as a possible end of the world, or end of human beings, but rather as a potential renewal and an opportunity to redefine the human being within a world in which it no longer finds itself and which it has therefore

ceased to respect. According to this perspective, critical posthumanism further accentuates the distinction already made between a technological posthumanism that sanctifies technology to the point of seeing the possibility of surpassing humans through their own creations and a biological/critical/ecological posthumanism that sees in the posthumanist discourse the opportunity to redefine humans in their relationship with their environment, nature, animals, but also with their fellow humans. This biological posthumanism embodied here by Wolfe and Braidotti is thus a new kind of posthumanism which relies on the possibility of a broader ecology of life. Hence, as Wolfe outlines, critical posthumanism is:

> A theoretical conversation that could make way for rethinking the anthropocentric location of critical discourse by creating space for recognition of the nonhuman. This conversation can potentially open possibilities broader than simply using posthumanism as a theoretical tool to reimagine existing human undertakings, disciplines, and knowledges.
>
> (quoted in Glasson, 2010:30)

Wolfe, as well as Braidotti, wants to go further and see posthumanism not just as an opportunity to redefine the human being but as an opportunity for human to use technology, which remains a central element of the posthuman turn, not only for their own sake but also for the purpose of integrating itself into a wider ecology of life. An already existing illustration of this use of technology can then be the creation of objects such as solar panels. This would not only be beneficial for humans who would regain a sense of belonging to the planet on which they live but for all living beings. This new ecology of life would even be a planetary ecosystem that would bring together humans and non-humans (living or not). Non-living beings, animals, plants and even human minorities would have the chance to be included in a global system of harmony and peace. As presented, in part, in Aldous Huxley's utopian novel *Island* mentioned earlier, a harmony between all would be attempted, a way of life respectful not only of the environment but of life in general without violence or war. Of course, at this stage it is difficult, even for the scholars advocating this theory, to put in place a detailed plan for the establishment of this harmonious world. It should be borne in mind that this idea is still very recent and remains a sort of dream about a possible human future on earth.

However, this does not prevent this dream from growing in many minds. In particular, Rosi Braidotti proposes a more sustainable vision of the world and of the human being, from a post-humanist perspective, through what she calls a "zoe-centric world" (Braidotti, 2018:43) that would represent "a new subjectivity beyond the boundaries of sexualised, racialised and naturalised categories" (Braidotti, 2018:43) in which humans and non-humans, living and non-

living, would mingle. In other words, a zoecentric world, *zoe* being a feminine noun from the Greek meaning "a non-human vital force of life" (Braidotti, 2018:42), would represent a complete, sustainable and peaceful ecosystem for all. The entire universe would then be considered to be governed by a single substance called *zoe* (life force), which is found in all living and non-living beings. The posthuman would therefore no longer be perceived as a machine being distant from its creator but rather as a human being who has evolved in the direction of a rapprochement with the world around it. In harmony with its surroundings thanks to the Braidottian concept of the zoe-centred world, the human being would no longer be the alienated creature it is in today's hyper-connected and robotic societies, but would have found a new, more harmonious and less alienating identity. Rather than competing with its creations or wanting to use them to become more efficient itself, human would see technology as a means of giving voice to what R. Braidotti has called the "missing people" (2016:29) which represents all those people, and things, that are marginalised today such as racial, sexual, social minorities, women, animals, nature, etc. Braidotti's vision of critical posthumanism is therefore part of the posthuman turn because it seeks to move towards a decentring and hopeful vision of the human within the planet. Moving away from the humanism that has sought for decades to put humans at the centre of all concerns, Braidotti wants to move away from the traditional subject of Western humanism that has prevailed for centuries and that is the image of the white, rich, Western man who wants to impose his capitalist, technological and patriarchal vision on the whole planet (post-colonial) to the detriment of the missing peoples. In other words, she wants to move away from the theory of human exceptionalism which defends the idea that human beings have skills, e.g. free will, culture, technology, that are more developed than any other organism (especially animals) and that allow them to position themselves as superior beings. As defined by Braidotti herself, this critical posthumanism is a set of:

> [T]heoretically sophisticated transversal discourses [that] combine attention to the earth with enduring care for the people who live closest to the earth – indigenous populations – thus raising the ethical and political stakes. The critique of western imperialism and racism provides an added critical distance – an extra layer of dis-identification – that positions [the] posthuman critical thinkers closer to the dispossessed and the disempowered, adding that many of those are neither human nor necessarily anthropomorphic.
>
> (Braidotti, 2018:50)

Through this definition, Rosi Braidotti demonstrates above all that this discourse moves away from everything known today and opens the door to people and non-humans that have until now been given little or no importance. It is therefore a complete renewal that is proposed here,

an opening out to something more, a whole that would create a powerful connection between all that inhabits the earth and more. According to Braidotti, this would involve "social and cultural movements, new kinds of economically productive practices in a market economy liberated from capitalist axioms, and multiple curiosity-driven knowledge practices that do not coincide with the profit motive of cognitive capitalism" (2018:53). It would no longer be a question of using others, nature or minorities in a quest for profit, capital and comfort, but rather a question of gathering everything, including all of us, in a quest for authenticity, harmony and natural peace. As a matter of fact, it is a kind of restoration of a connexion with nature that is at stake. This solution for a better world suggested by Braidotti is similar to the one to alienation due to "social acceleration" put forward by Hartmut Rosa. Indeed, he does not bring forward "deceleration" as a solution to the problem but rather a return to more resonant forms of life. Faced with a world that is becoming increasingly silent for human beings who no longer find meaning in it, they should rather return to moments that resonate, that is to say, that touch them, move them and give meaning to their relationship to the world, to nature and to other human beings. This is exactly what Braidotti proposes here: a return to a more authentic nature that would move humans.

It turns out that Braidotti is not the only one to submit this kind of theory relying on a more ecological and ethical way of life for humans thanks to technology, among other elements. In fact, this reconnection to nature or to a less destructive Human/Nature relationship, is indeed the main argument of several ecological perspectives on the world. Not to be associated with an idealistic or romantic vision of nature, this reconnection is to be understood in a more tangible sense through the relationship that it is possible to have with the environment on a daily basis. In this sense, some scholars, such as Jean-Philippe Pierron in his article "Beyond Anthropocentrism: Nature as a Partner" [free translation] (2013)[24], highlight what Braidotti has called a reconnection as being a shift from a finalistic or rational-economistic perspective (specific to capitalist societies) of nature to a gift-giver perspective. Indeed, nature should no longer be seen "as a cornucopia with humans as its recipients" [free translation] (Pierron, 2013:42)[25] or as "a set of means [...] at the disposal of human needs or desires" [free translation] (Pierron, 2013:42)[26] but rather as a giver who would offer humans what they need when they need it but never in excess. Hence, Pierron concludes by saying that "[t]he living human or non-

[24] Pierron, Jean-Philippe. "Au-delà de l'anthropocentrisme: la nature comme partenaire". La Découverte – Revue du MAUSS Vol.2, No. 42 (2013) : pp. 41-48.
[25] " […] comme une corne d'abondance ayant les hommes pour destinataires" (Pierron, 2013 :42).
[26] " […] un ensemble de moyens […] à la disposition des besoins ou des désirs humains" (Pierron, 2013 :42).

human, or even nature, are no longer conceived as a background against which we deploy our activities […] [t]hey become partners in interactions and relationships" [free translation] (Pierron, 2013:48)[27]. Nature and all its components are no longer instruments, places of exploitation, sources of profit... but rather partners, acolytes or even collaborators joining together to live in harmony. This perspective change with regard to nature is crucial in the development of critical posthumanism which, moving away from the anthropocentric discourse that has prevailed for decades in Western societies, seeks to redefine the human being in its relationship with its environment.

As Braidotti emphasises in her own theory, critical posthumanism is also a set of discourses allowing to "increase our freedom and understanding of the complexities we inhabit in a world that i[s] neither anthropocentric nor anthropomorphic, but rather geopolitical, ecosophical and proudly zoe-centred" (Braidotti, 2016:27). This discourse seeking to redefine the position occupied by human in nature is then to be perceived as enabling humans to better accept and discern the complex and multiple world they live in. In other words, it would allow them to see beyond a binary vision of the world and to grasp the complexity hidden behind dichotomies such as Nature/Culture, Human/Non-human, Animal/Human... In consequence, it would be a quest for the Other that would be at stake here, or rather a search for a common ground between entities that humans have been opposed to for decades. The question that can be asked here is why oppose these entities for so long when it could be easier to harmoniously find a balance between them? Stéphanie Chanvallon provides an answer to this question in her book *Anthropology of Human's relationship with Nature: Nature as experienced between destructive fear and intimate communion* [free translation] (2010) [28] by explaining that "[...] human has this capacity to categorise [and oppose] in order to better prioritise and give itself the illusion of superiority" [free translation] (142)[29]. In fact, in this book, which displays the search of the reason for human's destructive but also creative behaviour towards nature, Chanvallon emphasises the fact that the human being, because of an ancestral fear dating back to prehistoric times when humans had predators to be afraid of, seeks to establish its superiority in the face of a nature that has threatened it for a long time. Modern humans, having found, thanks to tools and technology, the means to defend themselves and to distance themselves

[27] " Le vivant humain ou non humain, voire la nature, ne sont plus conçus comme un décor sur le fond duquel nous déployons nos activités […] [i]ls se muent en partenaires d'interactions et de relations" (Pierron, 2013 :48).
[28] Chanvallon, Stéphanie. *Anthropologie des relations de l'Homme à la Nature : la Nature vécue entre peur destructrice et communion intime*. Université Rennes 2 : Université Européenne de Bretagne, 2009.
[29] "[…] l'homme a cette capacité à catégoriser pour mieux hiérarchiser et se donner l'illusion de supériorité" (Chanvallon, 2010 :142).

from this threatening and dangerous nature, no longer want to let go of this power and wants to develop it further. Chanvallon points out that "one of the most significant characteristics of the new urban society is that it is based on the principle of patriarchal domination, which is inseparable from the principle of authority: authority over nature, over slaves, women and children" [free translation] (2010:157)[30]. This sense of authority has become so powerful that human beings have abused it and forgotten the possible consequences.

The best example of this abuse is the emergence of the term 'anthropocene' in the 1990's, which refers to the idea that humans have now left such a mark on the earth and the last geological part of the planet that it would be impossible to deny that they ever existed on this one[31]. The human being has thus marked the planet with such power that its existence is engraved in it. This is what Stéphanie Chanvallon expresses when she speaks of "devastated nature, multiple pollutions, disappearances of species, [...] climate change and natural disasters [...] which are not natural upheavals" [free translation] (2010:449)[32]. Rather, she examines these as the consequences of excesses and disrespect on the part of human beings. However, she believes that as these consequences have a direct impact on the daily lives of the earth's inhabitants, they are gradually realising that something is wrong. Some of them even decide to advocate a return to nature, a way of living more harmonious with the environment that surrounds them, whether it is in a material way or in a way of living. This return to nature sought by some is exactly what is emphasised by Braidotti, Wolfe and Pierron in their desire for a more nature-friendly world through a change in the relationship that human beings have with their environment and their technology. The only difference is that individuals seeking to reconnect with nature do so on their own scale, in a more tangible way in everyday life. At this point, Chanvallon points out to her readers that:

> Some will say that Humans cannot find harmony with Nature. It is true that the current conditions offer little escape. This return to Nature would surely allow us to find a form of serenity, not because living in harmony with Nature is synonymous with a peaceful and non-stressful life, but because human beings would immediately accept their presence here on earth as being an inseparable element of the environment, acting on it and reciprocally. But humans

[30] " […] l'une des caractéristiques les plus significatives de la nouvelle société urbaine est qu'elle est fondée sur le principe de la domination patriarcale qui est inséparable du principe d'autorité: autorité sur la nature, sur les esclaves, les femmes et les enfants" (Chanvallon, 2010 :157).

[31] Carrington, Damian. "The Anthropocene epoch: scientists declare dawn of human-influenced age". *The Guardian* (August 2016).

[32] " […] nature dévastée, pollutions multiples, disparitions d'espèces, […] changements climatiques et catastrophes naturelles qui ne sont pas […] que des bouleversements naturels" (Chanvallon, 2010 :449).

> have long since broken their intrinsic adaptation to the environment by modifying and transforming their environment to suit their needs or desires [free translation].
>
> (2010:77)[33]

Consequently, for some, a return to a more stable and healthy relationship of reciprocity with nature is impossible. A return to nature, far from being a regression for Chanvallon, is the key to a more harmonious world where humans would find a certain authenticity because, although they are not always aware of it, they are "in search of Nature" [free translation] (Chanvallon, 2010:11)[34]. Some humans want to get away from the cities, away from the world as they know it, and reconnect by all means with neglected nature. As the study carried out by Chanvallon demonstrates, some will do this through simple practices such as diving or walking in the forest, and others will do it by changing their life completely to live closer to nature. All these practices constitute the moments of resonance Hartmut Rosa evokes. They may be simple, but they allow human beings to feel that they are slowing down in a world that is moving too fast. Anyway, this desire to slow down by all means is one of the characteristics of today's urbanised societies. The human must become aware of "what he loses in this sophisticated, over-technological life, consuming exhaustible goods and producing phenomena that pollute materially and psychically" [free translation] (Chanvallon, 2010:13)[35]. For Chanvallon, it is also a matter of inner pollution of the human being that can be called "psychological desynchronization" (H. Rosa) or alienation. This same alienation, due to modern capitalist societies, has already been put forward several times in this research as the Hegelian "action of becoming other, either by positioning oneself as a thing or by becoming a stranger to oneself [...], this is the state of the individual dispossessed of itself by the submission of its existence to an order of things in which it participates but which dominates it" [free translation] (Chanvallon, 2010:489)[36]. This alienation would deprive the human being of a meaning in its life and especially of an understanding of its place in nature, on the planet. Human beings must open their eyes to the

[33] " D'aucuns diront que l'Homme ne peut retrouver une harmonie avec la Nature. Il est vrai que les conditions actuelles offrent peu d'échappatoire. Ce retour vers la Nature permettrait sûrement de retrouver une forme de sérénité, non pas que vivre en harmonie avec la Nature soit synonyme de vie paisible et non stressante, mais parce que l'être humain accepterait sa présence ici-bas comme étant un élément indissociable de l'environnement, agissant sur lui et réciproquement. Mais l'Homme, a depuis bien longtemps rompu son adaptation intrinsèque au milieu en modifiant, en transformant son environnement pour qu'il soit adapté à ses besoins ou à ses envies" (Chanvallon, 2010 :77).

[34] "en quête de Nature" (Chanvallon, 2010 :11).

[35] " […] ce qu'il perd dans cette vie sophistiquée, technologique à outrance, consommatrice de biens épuisables et productrice de phénomènes polluants matériellement et psychiquement" (Chanvallon, 2010 :13).

[36] " […] l'action de devenir autre, soit en se posant comme chose, soit en devenant étranger à soi-même […], c'est l'état de l'individu dépossédé de lui-même par la soumission de son existence à un ordre de choses auquel il participe mais qui le domine" (Chanvallon, 2010 :489).

situation they have brought forward in their own environment and become aware that they are "an integral part of nature, and that they can also learn a lot about themselves by meeting nature. A real live encounter, *in life* and *inside*" [free translation] (Chanvallon, 2010:166)[37]. Nature here is then to be taken as a Whole and not just as a mere natural environment. It is to be taken in a Braidottian sense that Chanvallon fully shares and expresses as follows: "this Nature allows us to encompass a whole, the mineral as well as the organic, the microcosm as well as the macrocosm, which it IS" [free translation] (Chavallon, 2010:67)[38]. Hence, nature would involve the human being as well as all living and non-human beings. And this is what humans need to be conscious of in order to achieve not only material happiness but a more holistic identity that would allow them to rise spiritually and develop a way of living that is respectful of nature and the "Whole referring to the Universe" [free translation] (Chanvallon, 2010:66)[39].

This is exactly the identical meaning that should be given to the essence of the world that Rosi Braidotti called *Zoe*. In fact zoe, whole, nature, universe are but a multitude of terms brought by many scholars, including Braidotti, Chanvallon and Pierron, to designate the same idea: an authentic essence, an identity that the human being has lost by attempting to dominate and master a nature of which he was afraid. Nowadays, its duty is to accept the Other, to accept and "incorporate the other people, the crawling people, the standing people, [...] who fly, [...] who swim..." [free translation] (Chanvallon, 2010:28)[40]. In other words, it is a matter of accepting to return to a stage that would allow humans to find their place in nature and to learn to respect it again, because "denying animal life [and natural life in general] has undoubtedly led to the denial of human life at times" [free translation] (Chanvallon, 2010:28)[41]. Furthermore, it has to be noticed that, paradoxically, human beings have not given any place or importance to non-human beings, living or not, when it is well known that "our contemporary society affirms the importance and place in our daily lives of everything that is not human: machines, technologies, objects of all kinds" [free translation] (Chanvallon, 2010:29)[42]. This paradox is exactly what composes the roots of posthumanism as defined above. This same posthumanism

[37] " […] qu'il fait partie intégrante de la Nature, et qu'il peut aussi apprendre beaucoup sur lui-même en rencontrant la Nature. Une vraie rencontre, en direct, *in life* et *inside*" (Chanvallon, 2010 :166).
[38] " […] cette Nature nous permet d'englober un tout, le méniral comme l'organique, le microcosme comme le macrocosme qu'elle EST" (Chanvallon, 2010 :67).
[39] " […] un Tout faisant référence à l'Univers" (Chanvallon, 2010 :66).
[40] " […] incorporer l'autre peuple, le peuple rampant, le peuple debout, […] qui vole et […] qui nage…" (Chanvallon, 2010 :28).
[41] " Nier la vie animale a sans doute conduit à nier parfois la vie humaine" (Chanvallon, 2010 :28).
[42] " […] notre société contemporaine affirme l'importance et la place dans notre quotidien de tout ce qui n'est pas humain : machines, technologies, objets de toutes sortes" (Chanvallon, 2010 :29).

which, faced with a growing technology with disastrous consequences due to misuse on the part of humans, tries to bring hope and projects for a more ethical and ecological future to humans.

In conclusion, it is clear that posthumanism, and especially critical posthumanism, is a debated concept that is truly complex to define. Whether it is considered as a set of ideas in its own right or as transhumanism's descendant, the endpoint seems to be the same: posthumanism is a set of discourses considering the evolution of the relationship between human beings and technology within an ethical and moral framework that allows it to discuss the potential futures, or lack of it, of humans on earth. Critical posthumanism, on the other hand, goes even further as to enter into ecological debates specific to the 21st century and the situations of contemporary Western societies. It seems that the message of this latest discourse is that it is perhaps time for human beings to take their future on the planet into their own hands and to review their position within nature and even the universe. All this with the aim of achieving a harmonious future for everyone and everything. As Chanvallon, "[t]he time has come to heal the wounds of human cut off from the universe and to soothe the groans of nature exploited by humans" [free translation] (2010:10)[43].

Although it may come as a surprise to many, this message, from a contemporary and posthuman perspective, is also present in the novel that is the subject of this research: *A Clockwork Orange*. Without being an explicit manifesto for the posthuman turn, Anthony Burgess' novel displays some characteristics, of which the author was not necessarily aware at the time, and which can be characterised as posthuman. Some of these elements such as technology and the questioning of the human/technology relationship as well as the use of technology on the human being are elements that have already been discussed, through other perspectives, in the first section of this research. However, it goes beyond the presence of technology and a questioning of its use by humans. In fact, both technological and biological posthumanisms are present. Technology is therefore a central element that will be analysed here but not only. At this point, it must be borne in mind as already mentioned that this is not a novel that was written by its author for the purpose of a posthuman reading. The notions of Haraway's cyborgs, Braidotti's zoecentric world or Chanvallon's return to nature are therefore explicitly absent from the novel. Nevertheless, the reader can detect the implicit presence of posthuman elements. The biological perspective is the most implied one but different concepts of Braidotti,

[43] " Le temps est venu de guérir les blessures de l'homme coupé de l'univers et de calmer les gémissements de la nature exploitée par l'homme" (Chanvallon, 2010 :10).

Chanvallon, Rosa or even Pierron can be detected between the lines especially in a more precise analysis of the last chapter of *A Clockwork Orange*.

## A reading of *A Clockwork Orange* at the posthuman turn

At this point of the research, numerous elements related to Burgess' personal life (music, war, assaults…), the post-war society in which he lived and wrote and the dystopian turn of the 20th century have been highlighted as interesting sources for a variety of interpretations of *A Clockwork Orange*. Several of these elements such as violence, technology, human nature and music may, through a 21st century reader's perspective, acquire a particular meaning and therefore lead to a completely distinct interpretation of the book under consideration. More specifically, at the time of the posthuman turn that has been explored above, these elements, being taken under the prism of a new perspective, can shed light on a posthuman reading of Anthony Burgess' novel and analyse to what extent he anticipated a number of contemporary issues.

How much can human nature and behaviour be modified? To what extent can a human being become artificial? Can a human be stripped of its humanity through moral enhancement? Can or should technology be used on individuals to enhance them, through chemical modification of the human body, for example? Is this use ethical? Can technology open up new prospects for humans that are more ethical and harmonious with nature? All these questions emanate from the lines written by Anthony Burgess and are leads to follow to reinterpret the novel from a posthuman perspective. These same leads, using in particular the concepts of technological posthumanism and biological posthumanism that have been defined before, will be explored in what follows in order to shed light on a completely new reading and interpretation that can be given to Burgess' novel.

### *Human nature at stake: "What's going to be then, eh?"*[44]

Anthony Burgess' novel has often been described as ultraviolent. Whether it is physical violence, through the crimes committed by the protagonist, or sociological violence, through the methods of torture used by the government to reduce crime, violence is indeed the really first element that is offered to the reader. From the very beginning of the novel, the reader is submerged into a violence that seems to have no reason to exist and is therefore frightening

[44] Burgess, Anthony. *A Clockwork Orange*. London: Penguin Books, 2013, p. 7.

since Alex and his fellow criminals rob, beat and kill for what appears as the sake of adrenaline. Why do humans commit violent acts for the sake of it? Is it not inhumane to make one's fellow human beings suffer in this way? In order to answer this question, many of the experts already mentioned, such as G. Aggeler, P. Krämer and D. Bryfonsky, have highlighted different hypotheses based on the idea of biographical and sociological influences. According to these hypotheses, the centrality of violence in *A Clockwork Orange* is mainly due to personal events (for example, Burgess' wife experience of sexual assault) and the post-war context in which the novel was published. Nevertheless, beyond these external interpretations of the novel, what is important to keep in mind is that, from the very beginning of the novel, Alex, appears to be endowed with very little humanity in the eyes of the readers witnessing his misdeeds. This effect on the readers makes them question the origins of this violence. Some are satisfied with the claim that violence is gratuitous, without purpose or cause, and that Alex is therefore just a heartless young delinquent. This satisfaction is due, among other things, to the fact that there is no clear answer or explanation at the beginning of the book. It is only much later that the reader of the novel can realise the real purpose of this violence and slowly understand why the author has taken the risky decision to present his reader with so much aggressiveness and inhumanity within the same individual. In fact, far from being gratuitous, the violence in *A Clockwork Orange* is its keystone, allowing Burgess, among other things, to emphasise questions concerning human nature, to be understood as the set of characteristics specific to all members of the humankind (cf. footnote 1), and the future of human beings on earth. By questioning his humanity from the outset, the violence really seems to be an indication of Alex's inhumanity as he mistreats his fellow humans without regret. The only solution then is to prevent Alex, by all means, from committing such atrocities. But how to achieve this goal? Eventually, Alex is arrested and sentenced to 14 years in prison. This sentence, even for a 15 year old, seems relatively fair for the crimes he committed. Prison is known to readers as the logical punishment for any crime. The logic of the book throughout the first part then seems to match the reader's expectations: the response to a crime is a prison sentence.

However, it is from this conviction that Alex's story takes a very particular turn. Wanting to get out of prison as soon as possible, he volunteers to undergo a brand new method of which he knows nothing. It is at this point that an alarm in the reader's mind must ring and awaken in them a kind of mistrust. What is this new method allowing criminals like Alex to go out faster? What will happen? A question central to the novel then looms large: "What's going

to be then, eh?" (Burgess, 2013:85). This question, formulated about fifteen times throughout the book, is really a lead in the story as well as the first sentence of the novel:

> 'What's it going to be then, eh?'
>
> There was me, that is Alex, and my three droogs [friends], that is Pete, Georgie, and Dim, Dim being really dim, and we sat in the Korova Milkbar making up our rassoodocks [minds] what to do with the evening, a flip [very] dark chill winter bastard through dry.
>
> (Burgess, 2013:92-93)

The first opening lines of the novel, the question, read independently of the rest, seem to acquire a particular philosophical significance. The reader wonders what is going to happen: is it a question for him/her? Is it a rhetorical question? Is it a question that Alex, the narrator and protagonist, is asking himself? When they carry on their reading and go a few lines further, the answer seems to be potentially given by the author who tells the reader that the question refers to the planning of a youth 'party' that Alex is going to have with his friends. This way, the question seems to be answered simply and quickly.

Nevertheless, as observed above, the question recurs many times in the book at various and often key moments in Alex's story, especially a few pages before Alex decides to accept to participate in Ludovico's technique. At this point, Alex's future is unknown: what will happen to him? What is this new method (Ludovico technique) of dealing with crime? Will it be effective? The only certainty for the reader is that, after participating in the collective beating of another prisoner sharing his cell, Alex is still appearing inhuman. Hence, the reader continues to question the 'Reclamation Treatment' (Burgess, 2013:104) but remains in a frame of mind that allows him to identify with the government and the decisions made by its representatives such as the prison governor and the Minister of the Interior. Facing Alex's misbehaviour, the reader cannot but agree with the governor's conclusion when confronted with the corpse of the criminal killed by Alex in prison:

> 'The Government cannot be concerned any longer with outmoded penological theories. Cram criminals together and see what happens. You get concentrated criminality, crime in the midst of punishment. […] Common criminals like the unsavoury crowd' – (that meant me, brothers, as well as the others […]) – 'can best be dealt with on a purely curative basis. Kill the criminal reflex, that's all.
>
> (Burgess, 2013:101)

Convinced of Alex's inhumanity and the problem, or rather danger, he embodies for others, it is easy to understand the government's objective at this point. The composition of the curative

method to be used remains a mystery, and it seems like a good solution if it will prevent Alex from doing harm by killing "the criminal reflex" (Burgess, 2013: 101).

Nonetheless, nothing is as simple as it seems, and the treatment that is put in place, once started and brought to light in the eyes of the readers and the protagonist, turns out to be a method of torture, a brainwash rather than a cure. This cure can be described, as it has already been done in this research, by different expressions: "a drug-assisted aversion therapy", "a form of brainwashing" or "a behavioural conditioning treatment" (Zengin, 2012:97), but what is mainly apparent from these descriptions is the aim of changing the behaviour and morals of an individual, in this case Alex, by imposing on him an attitude that is considered suitable for and by society. In fact, this cure is based on behaviour or moral enhancement which actually seeks to raise the moral values and behaviour of a human being. This goal is sought to be achieved not by gentle methods such as education but by torture. This torture, playing on the chemicals and mental components of the human being, can be seen as an artificialising method. What needs to be enhanced for the moment are the questions concerning human nature and the modification of which it can be the object that this Ludovico's technique engenders.

Indeed, the reader is progressively realising that the cure, presented by the government as a miracle solution to criminality allowing to depopulate overcrowded prisons, is in reality torture which means that the punishment becomes worse than the crimes. What is being done here is not simple behavioural change like when positive behaviour is induced in a child by explaining that certain actions, such as biting or hitting, are wrong and cause pain to others. It is rather the destruction of an individual's free will by preventing him or her from doing wrong. It is no longer a question of trying to make people understand what is wrong, according to the society, but of imposing what is right. It is at this point that the reader becomes completely detached from the government's view of things and becomes aware of the truly ethical and philosophical dimension behind that famous question that seems to be repeated over and over again, "What's going to be then, eh?" (Bugess, 2013:143).

The answer to that question does not seem to be so obvious now. It becomes seems to epitomise a set of reflections about human nature, its natural goodness or evilness, but also the relationship between humans and technology, which will be detailed later, used in Ludovico's technique. The torture and transformation of Alex here turns to be a very thought-provoking element for Burgess' reader who begins to understand the doubts the prison chaplain had when Alex wanted to volunteer for what he thought was an innovative method of transforming criminals:

> I must confess I share those doubts. The question is whether such a technique can really make a man good. Goodness comes from within, 6655321. Goodness is something chosen. When a man cannot choose he ceases to be a man.
>
> (Burgess, 2013:92-93)

Human nature and its genuinely good character is, in consequence, clearly at stake in this discourse. It is obvious that readers are encouraged to question their own goodness or badness immanent in the nature of human beings. Is a human being really good if goodness is imposed upon it? But rather than questioning human nature and its authenticity, Anthony Burgess confronts his readers, through a maieutic process, with reflections on the future of the human species by bringing ideas and questions in the reader's mind.

All these questions concerning human nature and the possibility of modifying it in order to make it correspond to the wishes of a government or a society are therefore at the heart of Burgess' novel. The violence deployed by Alex and then by the government to transform Alex with the help of torture is then shown not to be gratuitous but to be used by Burgess to "demonstrate that a world with violence chosen freely is preferable to a world of conditioned goodness [...]" (Burgess quoted in Bryfonsky, 2015:43). In particular, this is where the demarcation, and its arbitrariness, drawn by society between what is considered harmless/worthwhile violence (in Ludovico's technique) and what is considered criminality (Alex's crimes) becomes clear. The reader is indeed encouraged to evolve throughout the book: from agreeing with the government's ideas of improving Alex, who is seen as a ruthless and inhuman young offender, the reader becomes aware of the horrific transformation that is forced upon the criminal, causing him to lose what little humanity he had left in the eyes of the readers. This shift in perspective from disgust to pity for the protagonist sends the reader back to his own humanity and free will, which are questioned here: is human nature profoundly good or profoundly evil? Is committing consciously violent acts enough to consider a person an inhuman criminal? Is violence, in all proportion, unnatural? Is conscious violence worse than imposed goodness? Is it possible to change human behaviour to the point of forcing it to be only good? Could what is happening to Alex happen to all human beings if one day it was necessary to ensure their future on the planet? Alex's situation, limited to the future of a single individual, seems to acquire a much greater magnitude in the eyes of the reader who generalises it. The question that can be asked is then: can Alex's situation be applied to all human beings in the end (especially if criminality appears as a sociological and human construction)?

This broadening of the questioned subject can, in fact, already be seen at a particular point in the story, when Alex and his droogs find themselves in a house called "HOME" (Burgess, 2013:23) in which a writer, whose manuscript is entitled "A CLOCKWORK ORANGE" (Burgess, 2013:25), and his wife live. Alex decides to destroy everything there, including the unfinished manuscript, and to rape the writer's wife in front of the impotent author. We can then speak of a 'mise en abyme' here by the presence of reality in the fiction reinforced by the title of the novel, reminding the reader of the title of the book he/she is reading.

Yet, beyond a simple 'mise en abyme' which is a common rhetorical device in literature, it is possible to detect a double 'mise en abyme' in this major scene of the book. In this extract, which is as violent as shocking, Alex destroys the space which, strangely enough, is called HOME. He commits there an irreversible act without even knowing that, later in the story, after his stay in prison and his transformation due to Ludovico's technique, this house called HOME will become a refuge for him and therefore, his own home in a way. It can be argued that Alex is destroying his own house at that moment, without being fully aware of it. Alex himself acknowledges this: "Home, home, home, it was home I was wanting, and it was HOME I came to, brothers. [...] HOME, it said and perhaps here would be some veck [man, guy] to help" (Burgess, 2013:165). He arrives at the house without recognising it right of the bat, telling himself that the word HOME is a good omen without realising that it is the same house he has ruthlessly destroyed. In addition, the name of his refuge is not the only element that highlights this astonishing reversal: the name of the author of the destroyed manuscript entitled *A Clockwork Orange* is F. Alexander, of which Alex could very well be the diminutive. As a result, in this moment of destruction taking place at the beginning of the novel, we can assume that Alex was destroying his own house. And this can be embodied as a 'mise en abyme' illustrating the human being destroying his home without realising it at first. As a result, Alex destroying HOME can be perceived as the allegory of the human psyche and behaviour destroying the planet, and it nature, which are none other than its home, its refuge. The analysis of this particular passage of the novel is then another illustration of Burgess' maieutic tendency seeking, through questioning, to awaken thoughts and ideas in the interlocutor (here the reader) : behind this image of a young delinquent destroying his house lies the human being ruining the planet. While Burgess may not have been fully aware of this message between the lines, it is clearly an added meaning brought about by a 21st century reading. Only a modern reader can observe that just as Alex, who, by destroying this space at the beginning of the novel, signs his downfall at the end of it when his host recognises him and ends up wanting to take revenge by

driving him to suicide, humans are spoiling the planet, their home, condemning themselves to their own doom.

The reflections that this reasoning entails in terms of human nature and human destiny are therefore essential for the development of the story and the protagonist. Of course, these considerations, demonstrated by Mark Greif's 'Crisis of Man' theory as reflecting human being's investigation of its nature in a European post-war context, particularly in the field of literature, can be characterised as being specific to the period in which Burgess wrote his novel. This idea has led experts such as R. K. Morris and M. Klein to make relevant sociological analyses of the relationship between a post-war context and *A Clockwork Orange* as it has been highlighted in the first section of this research. Nevertheless, it must be borne in mind that this questioning of human behaviour and especially the use of technology to modify it, as will be clearly highlighted later, is an essential element to be associated with concepts of transhumanism and posthumanism. Indeed, transhumanists are technophiles who place technology and what it can do for us on a pedestal. Posthumanists, more reserved or more concerned with ethical issues related to technology used on humans, still rely heavily, for a large part of them associated with a technological posthumanism, on technology and the idea that the future of humans rests on it. As a matter of fact, both concepts do rely on these considerations about the fact that humans can be altered or modified to the point of creating a new being that is posthuman. This desire to change humans (brains, bodies…) still far outweighs, as far as technological posthumanism is concerned, the ethical considerations around these modifications.

In *A Clockwork Orange*, at least at this stage of the analysis, there is no real posthuman reflection which means that the reader is not confronted with the creation of a partially or completely artificial being like robots or cyborgs. Nonetheless, this omnipresence of questions about human exceptionalism and behaviour is clearly an element tending towards a posthumanist perspective that Burgess unknowingly presents to his readers. In fact, the recurrence of this question, illustrated by the repetition of the phrase "What is going to be then, eh?" (Burgess, 2013:7), concerning first Alex's future and then the future of human beings in general, embodied in allegorical form by "HOME" (Burgess, 2013:23), does echo the questioning being at the root of posthuman debates today. Burgess's reader being led to investigate his or her own nature and the possibility of changing it, for example through technology, is thus not witnessing an authentic posthuman debate but is taking a first step towards what is at the origin of posthumanism. The reflection on human nature and its future

in the face of technology or possible modification is therefore to be analysed here as a first step towards a reading of the novel at the posthuman turn.

### *Alex as a clockwork orange: human's artificiality as a posthuman element*

From the same excerpt highlighted above and featuring Alex's destruction of HOME, it is possible to investigate deeper in terms of a posthuman reading of the novel. In fact, in the same extract, which is really a hub of the novel, the reference to the title of the book *A Clockwork Orange* is also a real call to the reader who is invited to put things in perspective. Once again, the role of the reader is to be highlighted: they are encouraged to step back to fully appreciate the impact of the book title on the protagonist. More precisely, in this scene, the title is explained by the fictional author, F. Alexander, through Alex's voice as follows:

> Then I looked at its top sheet, and there was the name – A CLOCKWORK ORANGE – and I said, 'That's a fair gloopy [stupid] title. Who ever heard of a clockwork orange?' Then I read a malenky [little] bit out loud in a sort of very high type preaching goloss [voix]: ' – The attempt to impose upon man a creature of growth and capable of sweetness, to ooze juicily at the last round the bearded lips of god, to attempt to impose, I say, laws and conditions appropriate to a mechanical creation, against this I raise my sword pen –'.
>
> (Burgess, 2013:27-28)

With hindsight, without the reader necessarily realising it, everything is revealed to him/her in a few lines and almost from the beginning. Alex himself is not yet aware that he is defining the status he will acquire through Ludovico's technique. Yet Burgess says it loud and clear through his characters: it is against what is going to be done to Alex that he raises his sword pen. He already stated this in his New Yorker article, "A Clockwork Condition", when he said that "it sometimes happens, however, that a mere entertainer like myself [...] finds himself forced to give his own views of deep matters" (Burgess, 2012:2). Once again, the 'mise en abyme' is present, but what must be kept in mind is the fact that Alex himself recites a text that will later resonate with/in him. In fact, after volunteering to undergo the Ludovico method which aims to have him "transformed out of all recognition" (Burgess, 2013:101), Alex himself asks a key question when he is presented to an audience as a trophy by the government that has succeeded in annihilating all traces of violence in him:

> Me, me, me. How about me? Where do I come into all this? Am I like just some animal or dog? […] Am I just to be like a clockwork orange? I didn't know what made me use those slovos

> [words], brothers, which just came like without asking into my gulliver [mouth]. And that shut all those vecks [men, guys] for some reason for a minoota [minute] or two.
>
> (Burgess, 2013:137-138)

At that precise moment, Alex recognises what he has become: a clockwork orange like the one described by his victim, F. Alexander. He has become a creature on whom goodness has been imposed without any moral or ethical choices being offered anymore. Alex has become good by force and has lost his free will in the process. There is a powerful echo of the destruction scene in HOME. Alex seems to return to this passage again and again, whether physically when he seeks refuge there after being freed or mentally through his thoughts and words. In reality, what Alex becomes aware of at this decisive moment and what is already partially defined in F. Alexander's manuscript is none other than a state of alienation. Alex can then be seen as the embodiment of a state of alienation, a mechanical state or, in other words, a human who can no longer identify with the world he lives in.

The symptoms of this state of alienation are quickly visible in Alex when he can no longer find himself in the actions he takes: goodness must direct his every move even when it does not reflect his true intentions. As a result, he literally cannot even think about killing a fly anymore : "[…] when he said that, I thought of killing a fly and felt just that tiny bit sick, but I pushed the sickness and pain back by thinking of the fly being fed […]" (Burgess, 2013:140). However, the most glaring symptom is undoubtedly the fact that Alex no longer recognises himself in the photographs taken of him after his transformation:

> And on the second page of the gazetta there was a blurry like photograph of somebody who looked very familiar, and it turned out to be none other than me me me. I looked very gloomy and like scared […]. What it said underneath my picture was that here was the first graduate of the new State Institute of Reclamation of Criminal Types […].
>
> (Burgess, 2013: 145)

Hence, he does not recognise himself either in the name he is given or in his appearance, he is clearly alienated from his actions (forced to act only with kindness), his identity (the one the government imposes on him as a cured criminal) and his appearance (his body in the photograph).

Even before his transformation, Alex, having consciously chosen violence to feel he exists, was not recognised as a normal being according to the codes of the society in which he lives. As Samantha Moya outlines in her essay, "*A Clockwork Orange*: The Intersection

Between a Dystopia and Human Nature" (2011), Alex is treated as "a pariah" (2) in a society characterised by "a culture that is slowly becoming one, all-consuming machine" (2). As a result, social peace is endangered and Alex is transformed into a sort of robot by the government, which wants to make him mechanically good by simply and physically preventing him from doing wrong. This is clearly expressed in several passages in the novel, such as the following one:

> But, brothers, this biting of the toe-nails over what is the *cause* of badness is what turns me into a fine laughing malchick [boy] [while reading a newspaper]. They don't go into what is the cause of *goodness*, so why of the other shop? If lewdies [people] are good that's because they like it, and I wouldn't ever interfere with their pleasures, and so of the other shop. And I was patronising the other shop. More, badness is of the self, the one, the you or me on our oddy knockies [alone], and that self is made by old Bog or God […]. But the not-self cannot have the bad, meaning they of the government and the judges and the schools cannot allow the bad because they cannot allow the self. And is not our modern history, my brothers, the story of brave malenky [little] selves fighting these big machines?
>
> (Burgess, 2013:46)

Being oneself is therefore the heart of the problem: to be understood here as to be a human being with free will and the ability to choose consciously between acting right or wrong, is not accepted by Alex's society. If Alex cannot be himself at home, in the streets, at school, or even in prison, what can he do except being alienated? Perhaps this is even a vicious circle that has been set up: being violent to feel that you exist in a society where you cannot be yourself, being rejected for that and then becoming even more violent to fight that rejection and so on. Maybe this is the key to the story: individuals, like Alex, fighting laws and ideas, perhaps even society's definition of violence and criminality, imposed on them by institutions more powerful than they are in order to be themselves.

Another proof of this alienation is that Alex cannot stand himself anymore since the transformation that the government made him undergo prevents him from dealing with his own nightmares: "I had a nightmare, and, [...] then, I found myself in my bed in this room. I wanted to be sick [...]" (Burgess, 2013:122). So it is indeed a question of a loss of identity, of what makes an individual the individual that it is. Alex loses everything he has, even the ability to have nightmares or listen to music: the young delinquent whom the reader took to be inhuman at the beginning of the novel because of his attraction to violence has become even less human than he already was thought to be.

The state of alienation embodied by Alex is defined even more precisely in relation to a societal phenomenon in another extract of the novel, in which F. Alexander, the owner of HOME, taking Alex under his wing on his release from prison without knowing that he is his

wife's rapist, describes the young offender as "[a]nother victim, [...] a victim of the modern age" (Burgess, 2013:166), adding further "[...] poor victim of the modern world" (Burgess, 2013:174). What is being brought to light here is the modern world that has been described in the previous sections of this research, a world in which machines take up more and more space and in which the human being can no longer identify with or understand what makes up its own nature. Humans are like children who have to adapt to a world they do not know, to the rules and laws that make it up, even if these do not reflect their own identity. This is also what makes *A Clockwork Orange* a dystopia: the social order and the way of being, and even perceiving things like criminality, that is imposed on people like Alex who are no longer recognised for what they are as human beings. Once again, this situation demonstrates "that a world with violence chosen freely is preferable to a world of conditioned goodness [...]" (Burgess quoted in Bryfonsky, 2015:43). Alex is then like the spokesman of a society. The society in which Burgess lived? Probably. The current capitalist and anthropocentric society? Definitely. Without even knowing it at the time, Burgess was already describing the problems of today's capitalist-run societies, in which human beings, as already explained by H. Rosa, are completely desynchronised from the interactive and natural environment around them. This is already the situation that Burgess unknowingly described in his book: "[...] what seemed to come out of it was that all lewdies [people] nowadays were being turned into machines" (Burgess, 2013:72). In consequence, Alex is not an isolated case but rather the embodiment of a societal phenomenon affecting all its inhabitants. What makes Alex and his droogs exceptions is that in order to escape this phenomenon of collective alienation, they chose violence. It is this choice of violence that is disregarded by Alex's society and that leads the government to want to turn him into a good citizen. As F. Alexander demonstrates by telling Alex that he is a victim of the modern world, the real problem is not the individual, nor the human being that is modified here, but the system. The functioning of society, which defines what is not socially correct or what is to be considered as delinquency or not, is the core of the problem. Crime then seems to be a creation of society and of collective life. Living together, human beings sometimes have to make choices at the expense of others. Violence is then to be seen as part of the concept of living together. The reader is then forced to ask himself how Alex will evolve, without violence, in a fundamentally violent world. This is what will lead to certain ethical considerations that will be analysed later.

In addition to being the symbol of an alienation that he is apparently not the only one to suffer from, Alex also represents anthropocentric characteristics of the society he lives in as of

today's societies. In fact, in trying to absorb the increasingly intrusive violence, the government does not seek to question society and its functioning in order to understand where this violence may come from, but decides to turn even more towards the human being and to transform it rather than its way of life, which does not necessarily correspond to its environment. Hence, the state tries to transform human nature and to annihilate impulses that are after all natural in order to make humans completely artificial and malleable. By depriving them of part of what makes them human, i.e. their emotions and instincts, the government transforms them into mechanical beings that respond only by induced reactions. In other words, it turns humans into a version of robots, mechanical/clockwork oranges that have lost all their vitality and juice. This is also where a purely posthumanist reflection can be put forward: in this quest for the man-machine or hybrid man.

Of course, it must be borne in mind that Burgess' reader is not presented with a real cyborg. The reader is presented with a robot-man who is not physically mechanical, i.e. with articulated limbs or otherwise, but rather a human being who has become mechanical because of a clockwork system that has been imposed on its body and mind. Indeed, as already explained several times, Ludovico's technique is a treatment based on the same principle as aversion therapy. This aversive therapy is based on the exposure to a stimulus, which in Alex's case, is the viewing of ultra-violent films, accompanied by unpleasant experiences or sensations, which in this case is a feeling of nausea triggered by the ingestion of a drug. The result of this association is the assimilation of the unpleasant sensation felt by the body as being the result of the stimulus. In Alex's case, his body associates the nausea and discomfort he feels with the violence he sees unfolding in the films. This therapy is presented in the book as a completely revolutionary technology, a solution to all of society's issues including criminality. This treatment may seem basic, but in the case of *A Clockwork Orange*, the process quickly becomes torture when the subject of the treatment is not kept informed of what he is about to undergo and has no way of stopping the experience:

> One veshch [thing] I did not like, though, was when they put like clips on the skin of my forehead, so that my top glaz-lids [eyelids] were pulled up and up and up and I could not shut my glazzies [eyes] no matter how I tried.
>
> […]
>
> 'Stop the film! Please, please stop it! I can't stand any more.' And then the goloss [voix] of this Dr Brosky said: 'Stop it? *Stop it*, did you say? Why, we've hardly started.' And he and the others smecked [laughed] quite loud.
>
> (Burgess, 2013:112 and 116)

Not being able to close his eyes and therefore being obliged to watch the films in their entirety and repeatedly, Alex is tortured. Progressively, he becomes a kind of hybrid to which certain reactions that become automatic (and not natural or instinctive anymore) are forcibly instilled. In other words, he becomes a partially artificial being. By injecting him with drugs that make him sick in front of all forms of violence, whether verbal, physical or mental, the doctors in charge of implementing this torture change the chemical products and reactions in his body. They manipulate them, select the ones to remain until these selected reactions, of natural origin, become mechanical, automatic. It is in this internal modification of the human being by means of a technological method that the question of artificiality lies. As a result, it is easy to understand how Alex is deprived of his humanity, which is partially replaced by artifices, automatisms induced by yet another human being. By dint of repetition, these automatisms end up appearing in situations other than that of torture in Alex's case. It is to this extent that the young hero of Burgess' novel embodies a real posthuman tendency: the human being, in its desire to "reduce life to a technical problem" [free translation] (Hunyadi, 2016:10)[45], transforms an individual into a robot with the aim of improving it and overcoming its natural limits (e.g. the body's chemical reactions).

In this situation, the title of the novel is once again a central element that summarises this artificiality and posthuman tendency without the reader knowing it at the beginning. It is only as the reader progresses in the reading that he or she can realise to what extent the title itself is a posthumanist element. Indeed, as Burgess himself states, his title comes from the phrase 'as queer as a clockwork orange' which is originally "an old Cockney slang phrase, implying a queerness or madness so extreme as to subvert nature" (Burgess, 2012:3). Initially used to refer to people who are homosexual, the phrase emphasises the so-called abnormality of this situation. The image of an orange, a natural fruit produced by nature without the intervention of human beings, becoming mechanical, deprived of its juice, its vitality and therefore of its natural aspect, is used to demonstrate how unnatural it would be to feel desire or feelings for a person of the same sex. Nevertheless, desire and feelings remain the result of natural chemical reactions of the body: whether these reactions are felt towards an individual of the same sex or not has no importance because it remains a natural reaction. It is therefore not the fact of feeling these sensations that is unnatural, but rather it is the attempt to modify or annihilate them that is. Considered as a disease until the 1990's, homosexuality "was removed from ICD-10 (international classification of diseases, 10th revision) only in 1992" (Smith,

[45] "[…] réduire la vie à un problème technique" (Hunyady, 2010 :10).

2004). As with all diseases, treatments have therefore been created to 'cure' homosexuality and aversive therapy, especially during the 1950's and 1960's, was favoured in these cases. This supposed cure was based on the exposure of a homosexual individual to a stimulus (vision of a naked person of the same sex, for example) associated with an unpleasant sensation (electric shocks or ingestion of apomorphine, a drug causing nausea). The parallel that can be drawn here with Alex's torture is particularly relevant. Potentially influenced by the kind of treatments that were in place during the period of writing of his novel, Burgess displayed, in place of homosexuality, violence as a disease to be eradicated by the government and society. Yet, as homosexual desires are, the violent instincts of humans are based on originally natural reactions of the body.[46] In fact, these aggressive instincts, as S. Chanvallon argues, come from the body's own natural environment and from prehistoric times when human beings, lacking all the means they have today, had to defend themselves against a nature full of predators and dangers. It was only when life in society began that this violence has been considered criminal and wrong because it prevented collective life from flourishing. Through the origin of the title of the novel used by Burgess and the parallel it allows to draw between the treatment of homosexuality, especially in the post-war period, and the treatment of violence in *A Clockwork Orange*, it is thus clearly demonstrated to what extent the use of technology (Ludovico technique) that is made by the government embodies a posthumanist tendency aimed at going against what is instinctive in human beings.

This particular treatment of violence allows Alex to be defined, through this artificiality which is imposed on him and distances him from his own humanity, as a transhuman meaning a human being who, here through a manipulation of his chemical composition, is in transition (hybrid) towards a being, human or not, surpassing all natural limits. The result of this transition, as already pointed out, would then be the posthuman who would suffer no limits or weaknesses since he would no longer be subject to natural elements (old age, illness, violent instincts, desires...). Ludovico's technique can then be seen as a first step in the creation of the posthuman, which confronts Burgess' reader with a real posthumanist consideration. This consideration present in *A Clockwork Orange* is, so far, to be associated with technological posthumanism, that is to say, that branch of posthumanism which, as did the technophiles

[46] This parallel between violence and homosexuality must of course be nuanced: the aim here is to highlight the violence with which both are treated, even though they are both 'phenomena' of natural origin (instinctive reactions of the body). Nevertheless, homosexuality remains a reality to be considered as non-violent. The parallel that is drawn here is only based on a literary analysis.

transhumanists, continues to rely on technology and technological devices to achieve the creation of a being without any natural limits.

In conclusion, even though the reflections on human nature presented above were only a first step towards a reading of *A Clockwork Orange* at the posthuman turn, it is by looking at the notion of artificiality that the concept of posthumanism acquires its full scope. In fact, Alex, tortured and chemically modified with the help of technology associated with drugs in the Ludovico treatment, becomes an artificial being, a clockwork orange. Having voluntarily chosen violence in a world where fully enjoying one's free will and therefore being oneself is not accepted by the norm, Alex is seen as a threat to social peace. The government is desperate to make him fit the norm, in order to expand the project and drastically reduce crime, and so subjects him to violent, torture-like brainwashing. Alex's violent instincts, which, although endangering his peers, are natural, are therefore considered a disease, an unnatural anomaly that must be eradicated at all costs. This has to be achieved, according to the government, even if it means changing Alex's human nature by transforming his instinctive behaviour into automatisms and making him lose his free will and, at the same time, the possibility of consciously choosing to do good or not. In consequence, it is possible to wonder to what extent Alex becomes a robot? Controlled by automatisms, the behaviour is no longer natural but is a result of the government's and the human being's will to go beyond the limits imposed on them by nature and to create a perfect being, without weakness, called the posthuman. Whether this is human or not is ultimately irrelevant in this case, what matters is that technology allows humans to become artificial beings in defiance of nature. This process, whether it is a transitional process or already a full posthuman apparatus, then indicates, for today's readers, how ahead of his time Burgess was and how it is possible to describe him as a visionary, especially in terms of the ideas that characterise the posthuman turn.

### *Ethical considerations: the particularity of Burgess' novel*

In addition to the profound reflection offered to readers on the artificiality of the human being modified by technology, Burgess' particularity, which proves how far ahead of his time he was, is his interest in ethics that is brought to light in *A Clockwork Orange*. Indeed, what also makes Burgess' novel so special to be analysed through a 21st century lens is the ethical questions he instilled throughout his work: can we really modify human beings and their nature

without consequences? Is it right to use technology in the way it is used in Ludovico's technique? Is it ethical to modify the natural instincts and inclinations of humans? Are the ethical consequences of such a desire to challenge nature not such that the goal of a being free of all natural constraints becomes derisive? Because of Burgess' self-declared maieutic purpose, all these questions are raised while witnessing everything Alex goes through. Having created a protagonist deprived of his free will, his instincts, his humanity and his passions, Burgess decides to place particular emphasis on the ethical consequences of this artificialisation of the human being. The ethics put forward here are to be understood as the set of values and moral principles that allow an individual to control its own behaviour and in particular to choose to do either good or bad with full knowledge of the facts.

Although acknowledging himself the great influence of authors embodying what is today called the dystopian turn such as George Orwell and Aldous Huxley, Anthony Burgess, has, as an ethical dystopia, a special place compared to them. Novels such as Huxley's *Brave New World* and Orwell's *1984* also deal with torture techniques (e.g. Huxley's torture by electrocution to prevent new-borns from loving natural things like flowers), the use of drugs to modify human behaviour (e.g. Huxley's Soma) or the artificialisation of human beings (e.g. Orwell's torture or brainwashing), but the emphasis is on awareness, knowledge. In fact, the unethical use of technology, drugs or other is not really highlighted by these authors. On the contrary, the emphasis is mainly on a warning to the readers: you must know, be aware of the negative consequences (political, social, personal...) that a technological advance, a too fast industrialisation (Huxley) or the arrival in power of a complete totalitarian apparatus (Orwell) can engender. Like many dystopias, these novels function essentially as warnings about certain potential futures, especially in light of events such as the two world wars and the rise of totalitarianism in the early 20$^{th}$ century. Indeed, as already highlighted using Pospíšil's criteria, Orwell's, Huxley's and Burgess's works can all be qualified as prophetic dystopias, which means that "they are mostly indicated [...] to take place in the future [...], they must have some relevance to the present [...], the effect on its reader must be that of a warning" (2016:13). *A Clockwork Orange* is also to be seen as a warning about an increasingly violent, technological and capitalist society, just as *1984* is a warning against totalitarianism and *Brave New World* against industrialisation and mass technologisation. The difference is that the warning Burgess puts forward is primarily an ethical one. The novel focuses less on the opposition between good and bad and the consequences of the empowerment of the bad side, but rather on the fact that

both sides are two inseparable components of human nature and separating them can have dire consequences:

> What Burgess shows here is that when free will is taken from one, emotion is eliminated as well. […] It means having the choice to experience every emotion on the human spectrum, for one can only perceive beauty when they are open to the full human experience that lies behind good and bad.
>
> (Moya, 2011:4)

Burgess' society is not presented through a manichean prism as in Orwell and Huxley, although of course nuances can be observed with both authors, but rather through a vision that recognises, as Samantha Moya argues in her previously mentioned essay, that "suffering and happiness [as well as good and bad] are symbiotic" (2011:4). Good and bad cannot be considered independently: to want to annihilate one is to remove all meaning from the other. It is necessary to have the opportunity to know what 'doing bad' is in order to understand what 'doing good' entails. As Samantha Moya states, the peculiarity of human nature is indeed that each individual is endowed with a free will to consciously choose between good and bad. In Alex's case, it is this ability to experience the emotions of both good and bad sides that is taken away from him, depriving him of what ultimately allows him to cope with a world that is not only good or bad but complex.

Indeed, Alex himself, in a world like this, seems to have chosen violence to feel stronger emotions, to feel himself exist and perhaps even to try to feel something natural (instinctive). In other words, "he commits horrible crimes because it is all that allows him to feel emotions in an increasingly robotic world" (Moya, 2011:3) in which he has to meet the standards dictated by society. From then on, it is only in the passages of the book that relate moments of violence that Alex switches to the register of emotions, of positive sensations, and fully describes what he feels, as, for example, in the following extract where he imagines himself participating in a rape while listening to classical music:

> Oh, bliss, bliss and heaven. I lay all nagoy [naked] to the ceiling, my gulliver [head] on my rookers [arms or hands] on the pillow, glazzies [eyes] closed, rot [mouth] open in bliss, slooshying [hearing] the sluice of lovely sounds. Oh, it was gorgeousness and gorgeosity made flesh. […] As I slooshied [heard or listened], my glazzies [eyes] tight shut to shut in the bliss that was better than any synthemesc Bog or God, I knew such lovely pictures. There were vecks [men] and pitsas [women], both young and starry, lying on the ground screaming for mercy […].
>
> (Burgess, 2013:38-39)

Violence, in this case, allows the young protagonist to feel what nothing else in this dull and monotonous world allows him to feel.

As Craig Pinkney explains in his 2017 lecture previously mentioned in this research, many wonder why a young man ever decides to turn to violence. Burgess' novel is no exception to this rule and also asks this crucial question through the character of P.R. Deltoid, Alex's post-corrective adviser:

> What gets into you all? We study the problem and we've been studying it for dawn well near a century, yes, but we get no further with our studies. You've got a good home here, good loving parents, you've got not too bad of a brain; Is it some devil that crawls inside you?
>
> (Burgess, 2013:45)

Perhaps the answer is the one provided by Craig Pinkney: feeling invisible, unrecognised in the society around him that seeks by all means to make him follow a path already mapped out in advance, Alex is violent to experience strong sensations. This choice of violence in a world where nothing else allows him to channel his impulses is particularly felt in various passages of the book: "But myself, I couldn't help a bit of disappointment at things as they were those days. Nothing to fight against really. Everything as easy as kiss-my-sharries [buttocks]" (Burgess, 2013:18). As a result, before he is completely alienated, completely disconnected from his own society and his own life, Alex tries everything and gets his feet wet in violence because it is the only way he has found to put excitement and colour in a world that has become grey and where everyone has to settle down to be accepted. Unfortunately for Alex, the Ludovico technique will take away his means to feel himself by preventing him not only from acting badly but also from thinking or speaking badly.

After this loss, it is not so surprising that Alex, deprived of everything that still made him human despite his aggressive tendencies, turns to the ultimate solution: suicide. This is not uncommon in dystopias of this kind and this idea of suicide is an intertextual echo with the aforementioned Huxley's novel, *Brave New World*. In fact, Huxley decides to have one of his main characters, John the Savage, commit suicide too, and the reason for this suicide is even very similar to Alex's one: John the Savage can no longer stand the world in which he lives. This world has become meaningless for him, a place that no longer echoes his own identity, his own humanity, and he decides to end his life rather than live in a world populated by human beings who no longer know sickness, love or violence. Alex embodies a similar case here: deprived of his violence but also of his free will, he refuses to live in a world where he cannot

even read the Bible or medical books. Indeed, Alex, once cured of his impulses and released from prison, soon realises that it is impossible for him to lead a normal life without violence, since violence is itself part of the world around him:

> There was a medical book that I took down, but when I opened it it was full of drawings and photographs of horrible wounds and diseases, and that made me want to be sick just a bit. So I put that back and then took down the big book of Bible […] thinking that might give me like comfort […] but all I found was about smiting seventy times seven and a lot of yahoodies [Jews] cursing and tolchoking [hitting] each other and that made me want to sick, too.
>
> (Burgess, 2013:55)

Nothing can bring comfort to Alex, who realises that the society that has tried to push him to be only good is far from being benevolent itself. The world around him is made up of both good and bad things, but he cannot stand the bad ones anymore, which turn out to be more numerous than expected. As already stated, violence is part of the society and trying to annihilate it is absurd because it will always come back. If society does not change, trying to transform its citizens instead makes no sense and only creates contradictions with which individuals like Alex have to deal. The illustration of the ineffectiveness of the government's cure is that Alex ends his completely paradoxical situation by using violence on himself (suicide) which is even more paradoxical. This is why Alex failing his suicide attempt, unlike John the Savage, and his story therefore continuing is very important in terms of ethics. Indeed, it is because the book does not end with a suicide and thus a final warning to the reader that the ethical aspect of Burgess' novel acquires a real significance: "I JUMPED, O my brothers, and I fell on the sidewalk hard, but I did not snuff it, oh no. If I had snuffed it I would not be here to write what I wrote have" (Burgess, 2013:183). Through his failed suicide attempt, not only were readers given access to Alex's story but also to the continuation of his story which is then in a post-artificialisation period: "What is going to be then, eh?" (Burgess, 2013: 7).

In fact, it is this continuation of the story that allows the reader to become fully aware of the strong impact of the ethical questioning and its particular significance in the novel. This can be observed in particular when, with the necessary hindsight and knowing that Alex, because of the transformation he has undergone, is going to attempt suicide, the reader is brought back to a particular passage where the ethical reflections become more explicit:

> Any questions? 'Choice' rumbled a rich deep goloss. I viddied [saw] it belonged to the prison charlie. 'He has no real choice, has he? Self-interest, fear of physical pain, drove him to that grotesque act of self-abasement. Its insincerity was clearly to be seen? He ceases to be a wrongdoer. He ceases to be a creature capable of moral choice.' 'These are subtleties' like

> smiled Dr. Brodsky. […] 'Hear, hear,' said somebody. There was a lot of govoreeting [talking, speaking] and arguing then […].
>
> (Burgess, 2013:137)

In this passage, Alex has just been exhibited, like a freak, on a stage facing a man insulting and abusing him and then facing a naked woman. Confronted with the first, he found himself impotent and was forced to lick the man's shoes in a humiliating gesture of submission. Faced with the second, his unhealthy sexual thoughts made him sick and he was forced to treat her with deliberately exaggerated respect. Humiliated in front of hundreds of people, Alex makes his tormentors proud. It is at this point that the lack of ethical consideration of these tormentors makes the audience react. At first, the public present at the meeting is indeed enthusiastic, but soon realises that what has been done to Alex may not only be a matter of public good but also of torture. When Alex himself shouts in front of everyone that he has become a "clockwork orange" (Burgess, 2013:138), the notion of choice and free will make their appearance. As can be seen in the extract quoted above, the outrage at Ludovico's technique here quickly leads to debate and fear at what or who Alex has become, that is, a being without free will, without choice and without defences. With the benefit of hindsight and further reading, Burgess' readers can then realise the extent to which it is undoubtedly the suicide attempt, as well as the use of it by the current government's enemies and the media to prevent its re-election, that will later give the full extent of an ethical awareness within the society in which Alex lives. Notwithstanding the fact that it is possible to see that this ethical awareness emerges as soon as Alex is released, Alex's suicide takes on a more ethical dimension than, for example, that of John the Savage which closes Huxley's novel. The ethical reflections in the reader's mind acquire a real importance at this moment of the narrative when the government's lack of ethical consideration results in a suicide attempt.

At this point, a detachment with regard to a technological posthumanism, notably present through the discussion of Alex as having become an artificial being, can be noticed. In fact, as it has already been highlighted with the triumphal presentation of Alex as a cured criminal, a great enthusiasm about technology is illustrated in the way the government and its representatives (the governor, the minister of the interior, the director of the prison, Dr Brodsky, the nurses...) have wholeheartedly embraced Ludovico's technique and the use made of it in order to transform Alex into an honest citizen against his will. Actually, they praise on having dawned "a nice crime-free era" (Burgess, 2013:145). This enthusiasm and pride in the

transformative possibilities of technology for human beings is also noticeable in the following excerpt:

> Tomorrow we send him with confidence out into the world again, as decent a lad as you would meet on a May morning, unvicious, unviolent, if anything – as you will observe – inclined to the kindly word and the helpful act. What a change is here, gentlemen, from the wretched hoodlum the State committed to unprofitable punishment some two years ago, unchanged after two years. […] But, gentlemen, enough of words. Actions speak louder than. Action now. Observe all.
>
> (Burgess, 2013:134)

However, this discourse being followed by protests from a public with more moral considerations than the government itself clearly puts a brake on this technophile enthusiasm. This distance from technology echoes a more biological posthumanism that considers the concept of posthumanism not only as the consideration of technology in order to create a being that may no longer be human at all but rather as a discourse that redefines humans in their relationship with their environment, nature, animals, but also with their fellow humans. Hints of this biological posthumanism, beyond the ethical reflections that are already evidence of a posthumanist reflection in *A Clockwork Orange* and notably represented through the theories of R. Braidotti mentioned in this research, can be particularly observed in the last chapter of the novel which will be, among other things, the object of the following last section.

### *Burgess' last chapter: restoration of the human self?*

Biological or critical posthumanism is, as has been outlined, a branch of posthumanism that seeks above all, as Wolfe argues, to "make way for rethinking the anthropocentric location of critical discourse by creating space for recognition of the nonhuman" (quoted in Glasson, 2010:30). In other words, the aim of this more ethical posthumanism trend is to move away from anthropocentrism and human exceptionalism to open up to a broader ecology of life that can encompass humans, nonhumans and artefacts (non-living things). R. Braidotti and C. Wolfe are two of the leading names representing this posthumanist branch. Of course, the reader will not find elements of, for example, a zoecentric world as defined by Braidotti as a sustainable and harmonious ecosystem for all. Nor are Burgess' readers confronted with a posthuman understood as a human being who has completely evolved in the direction of a rapprochement with the world around it. This is why the purpose here is not to analyse *A*

*Clockwork Orange* as a posthumanist novel but rather to conduct a new reading of this novel at the time of the posthuman turn. Nevertheless, it is possible to detect novelistic elements to which certain posthumanist principles (biological here) can be applied, such as, for example, Braidotti's principle of missing people (people, and things, that are marginalised in today's societies such as racial, sexual, social minorities, women, animals, nature…).

In fact, it has already been mentioned before that the world in which Alex lives is based on a deeply anthropocentric social structure that perceives the human being as the centre of all concerns. More precisely, the attempt to modify Alex, a human being, in order to annihilate his natural impulses is, among others, a proof of this anthropocentrism seeking solutions to all human problems within itself as if nothing else mattered.

Another proof is also to be observed in the way settings and characters are depicted or not in *A Clockwork Orange*. Indeed, Burgess describes an urban society representing a futuristic London where the only characters who have a right to real speech and real importance are white men from middle and high social classes: Alex, F. Alexander, the chaplain, Alex's droogs, Dr Brodsky... are perfect examples. Women, people of colour, members of the LGBTQIA+ community, animals, natural elements and the countryside are hardly or not at all represented in the book's universe. All of these people or things, whom Braidotti refers to as the "missing people" (2016:29), are indeed missing from the plot of the novel, or are almost absent.

Women are present, although there is no mention of women of colour, but they are depicted as sexual objects or punching bags for men. Whenever a woman appears, she is either assaulted, as when Alex and his droogs attack a shop manager[47], raped, as the writer's wife in HOME, or even killed, as is the old woman living alone with her cats whom Alex eventually beats to death[48]. No mention of female-on-female or non-violent sexuality is made in the novel, and no woman appears in the book without sexual innuendo or as being of any importance. Even Alex's mother is verbally abused by her son at various points in the story and does not hesitate to replace him with Joe, a tender and attentive young man, when Alex is sentenced to 14 years in prison.[49] Alex himself says: "I was in such bliss, my brothers. Pee and em in their

[47] "Mother Slouse, the wife, was sort of froze behind the counter. We could tell she would creech [scream] murder given one chance, so I was round that counter very skorry [fast] and had a hold of her […]" (Burgess, 2013:16).
[48] "And then, before he told me, I knew what it was. The old ptitsa [woman] who had all the kots and koshkas [cats] had passed on to a better world in one of the city hospitals. I'd cracked her a bit too hard, like. Well, well, that was everything" (Burgess, 2013:81).
[49] "It's you two I [Joe]'ve got to think of, who've been like a father and mother to me. Would it be right or fair to go odd and leave you to the tender mercies of this young monster [Alex] who has been like no real son at all? He's weeping now, but that's his craft and artfulness" (Burgess, 2013:149-150).

bedroom next door had learnt now not to knock on the wall with complaints of what they called noise. I had taught them. Now they would take sleep-pills" (Burgess, 2013:39). So he had taught them not to complain: it seems clear to the reader at this point that it was with violence that Alex made his parents understand not to complain about his behaviour.

In addition, animals are not generally treated any better. They are hardly mentioned and the only ones that are really present in the novel are all domesticated animals, like the cats of the old woman murdered by Alex. Moreover, animals and their characteristics (growls, appearances...) are often linked to violent thoughts or acts, as for example in describing the crimes committed by Alex and his droogs[50], or killed without mercy[51]. The only rather positive description of a natural landscape and its components is given by Alex when he sees paintings of country landscapes in the house of the old woman he is about to kill. When describing the paintings, he insists that these kinds of landscapes are part of the good old days, the past: "So down I ittied [went], slow and gentle, admiring in the stair well grazhny [dirty] pictures of old time – devotchkas [girls] with long hair and high collars, the like country with trees and horses [...]" (Burgess, 2013:67). Is he only expressing the fact that this landscape is one of the past chronologically speaking? Or is he expressing the fact that, in his own society, such country and bucolic landscapes are becoming rare? This is a question that remains unanswered by Burgess despite the fact that the reader can easily understand that it is probably both here. Alex referring to these paintings as dirty is also indicative of the fact that these representations are a far cry from the life he leads in his London of the future. In consequence, nature, the past, animals and the like seem to have no place at all in this violent world, and they are not the only ones. Sexual (LGBTQIA+), social and racial minorities are not even mentioned once. The only community mentioned is the Jewish community, which is associated with the violence they suffered during the Second World War and, moreover, with the torture experienced by Alex during Ludovico's technique since this community populates the horrific films that Alex is forced to watch.

This presence, or rather absence, of Braidotti's missing people, which is a central element of her vision of a zoe-centric posthuman world, has in fact allowed Burgess, without being fully aware of it, to depict a totally urban world populated only by human beings who

[50] "[…] Get out at once before I throw you out.' So poor Dim, masked like Peebee Shelley, had a good loud smeck [laugh] at that, roaring like some animal" (Burgess, 2013:27).
[51] "We fillied [played] round what was called the backtown for a bit, scaring old vecks [men, guys] and cheenas [women] that were crossing the roads and zigzagging after cats and that. […] at one place I ran over something big with a snarling toothy rot in the headlamps, then it screamed and squelched under and old Dim at the back near laughed […]" (Burgess, 2013:25).

seem to have little regard for animals, nature and even for their peers of particular social, racial or sexual classes. Hence, there is little joy and diversity in this totalitarian world that tries to unify human beings in order to control them better thanks to a world designed to cut them from their natural impulses and in which gender and race violence is common. In fact, all differences seem to become a danger, a risk for social peace and must be neutralised, eradicated or cured such as Alex's violence. From this rather pejorative description of Alex's society, it is easy to understand to what extent human exceptionalism, already defined as a discourse defending the idea of the superiority of human beings over any other organism on earth, is perceptible: it is notably embodied by the government and its attempts to cure human beings of their natural instincts through technology and artifices created by humans themselves. Furthermore, what is really to be considered here is how this world is perceived by certain characters such as F. Alexander, author of the manuscript *A Clockwork Orange* in the novel, and by the drunken old man beaten up by Alex and his friends on their first night of violence. Both characters describe their world and society as "a stinking world" where "there's no law nor order no more" (Burgess, 2013:20) and where the inhabitants are "[...] poor victim[s] of the modern world" (Burgess, 2013:174) and are all "being turned into machines" (Burgess, 2013:172). As a matter of fact, Anthony Burgess does not present his fictional world as a desirable one but rather as a world that should be avoided. It is therefore logical, as is indeed the case in many dystopias, that it is the critique of a too alienating, unethical and anthropocentric world that is presented here. This critique then echoes, in the eyes of a contemporary reader, the "critique of western imperialism and racism" (Braidotti, 2018:50) put forward by Braidotti in her definition of critical or biological posthumanism.

Although this particular depiction of society in *A Clockwork Orange* is already a productive lead for a reading of the novel at the posthuman turn, it is more specifically the last chapter of the novel that provides a real opening towards a new interpretation. In fact, Alex, after his failed suicide attempt, causes a media storm and becomes a kind of martyr. Even while in a coma, he becomes the origin set point of a popular uprising: citizens are outraged at the way he was treated and the torture he suffered, all in a political game set up by the current government. When he wakes up from his sleep state, he becomes aware of this and especially of the fact that, forced by popular indignation, the government has used hypnosis to give him back his free will and his love of violence:

> '[T[he people are on fire with indignation. You have killed those horrible boastful villains' chances of re-election. They will go and will go for ever and ever. You have served Liberty well'. […] Out of one glaz [look] I could read like headlines which were sort of trembling in the

> rooker [hand] of the chelloveck [man] that held them, like BOY VICTIM OF CRIMINAL REFORM SCHEME and GOVERNMENT AS MURDERER […]. 'What is all this?' 'Deep hypnopaedia' […] 'You seem to be cured'
>
> (Burgess, 2013:185-189)

Alex then progressively realises that he has been manipulated multiple times: by the government, who, wanting to display its effectiveness in reducing crime, has tortured him, and by a group of anti-government people who, wanting to prevent a government capable of torturing its citizens from being re-elected, have driven Alex to suicide. He could have been possibly outraged by this, but instead he uses the situation to his advantage and returns to his old life of crime, drugs and classical music which he can enjoy to the fullest again.

It is in the light of what can be perceived as a return to normalcy for Alex that the last chapter of *A Clockwork Orange* acquires a particular importance. In fact, Alex, once again leader of a gang he does not identify with and having seen one of his former comrades, Pete, who is married with a stable situation and soon to be father, realises that something is missing in his life. Alex is once again capable of violence and yet, although the world around him has not really changed, he is not the same and does not feel the same enthusiasm for aggressiveness. It is when he later sees a picture of a baby in a magazine that he fully realises he had a surprising desire to start a family. Now 18, he understands something simple that seems to be an essential revelation for him: "And now, I felt this bolshy [big] big hollow inside my plot [body], feeling very surprised too at myself. I knew what was happening, O my brothers. I was like growing up. Yes, yes, yes, there it was. Youth must go, ah yes" (Burgess, 2013:203). Alex understands that he needs to grow up, to change and that this is natural. In the end, he is no different to anyone else but his violence was a way for the younger version of himself to feel like he existed until he figured out what he really wanted to do with his life. Eventually, Alex consciously abandons violence, and decides to devote himself to a much more productive project: starting his own family. The future opens up for this human being who chooses to change his behaviour on his own and without being forced to do so by technological means or by men trying to change his deepest nature, because, in fact, by subjecting him to Ludovico's technique, it is the natural process of adolescence and identity building that the government has undermined in Alex.

Although this moment of change experienced by Alex can be interpreted in many ways, in the present reading of the novel, it acquires a special significance as a moment of revelation. In fact, as many experts like H. Rosa and S. Chanvallon agree, the solution to a certain kind of alienation engendered by a too technological and capitalist world, of which Alex is an example,

is indeed hidden in moments of epiphany which are moments in which humans find meaning in the world around them. The moment in which Alex becomes aware of a process of ageing to which he is subject and a growing desire to be a father then seems to be an illustration of this type of moment in which the world around him seems to resonate and take on a meaning that it did not have before. Alex, deprived of his humanity and human nature for a long time, seems to reconnect with the world around him and discover himself as a living being above all subject to laws of nature that are beyond him (old age, reproduction...) and that it is dangerous to try to counteract as the government has tried to do with the protagonist. As he is admiring a photograph of a baby, he realises that all the violence he has displayed up to that point was merely a kind of protective phase in the face of a still uncertain future and of a lack of understanding of the world around him. He then recognises that his violent phase, far from being a complete anomaly that has to be cured, was above all a stage in a quite natural process of becoming older:

> I was eighteen now, just gone. Eighteen was not a young age. At eighteen old Wolfgang Amadeus had written concertos and symphonies and operas and oratorios and all that cal [shit], no, not cal [shit], heavenly music. […] Eighteen was not all that young an age, then. But what was I going to do?
>
> (Burgess, 2013:202)

Alex eventually becomes aware that he has been the victim, or the subject, of a natural process beyond himself that all human beings experience. This may seem simple but it is a real moment of resonance, a change of perspective on the world and on human nature:

> […] there was something happening inside me, and I wondered if it was like some disease or if it was what they had done to me that time upsetting my gulliver [head] and perhaps going to make me real bezoomny [crazy].
>
> (Burgess, 2013:99)

It is an inner process that takes place here and there is no doubt in Alex's mind that he is experiencing something special, a revelation.

Echoing Chanvallon's theory, Alex realised that he was "in search of Nature" (Chanvallon, 2010:11). Not finding what he was looking for in the technological, materialistic and anthropocentric world in which he lived, he used violence in an attempt to push back the state of alienation to which he was subject. Only after experiencing a state where his natural instincts and impulses were restricted, does Alex understand that other means of reconnecting

to his human nature exist, such as fathering, which is based on the natural process of reproduction.

Although this could be interpreted by some as a kind of capitalist manifesto about a young man coming of age and realising that he has to settle down and live a life like everyone else by finding a job to participate in society, earn money and spend it, a deeper interpretation is possible in particular at the posthuman turn. Indeed, the moment of revelation experienced by Alex can also be interpreted as an individual's awareness of belonging to an ecosystem that is not limited to the world around him (in this case, an urban environment cut off from nature). Hence, Alex has become aware of who he is by reconnecting to his true human nature which is first and foremost that of being an animal subject to natural conditions such as the ageing process, reproduction (in the image of the baby and his desire to be a father)... It is as if he is becoming aware of being part of a natural whole beyond human society echoing Braidotti's idea of a new and broader ecology of life where everyone would have their place and where human beings would become aware of the particular relationship with their environment.

In addition, if the reader takes into account, as demonstrated earlier, that Alex, through a process of allegory, can represent human beings destroying their home, nature, the planet, it is possible to perceive in this reconnection to natural processes that they have in common with animals the possibility of a better world in harmony with the natural environment. Of course, this possibility is not tangibly depicted or clearly expressed by Anthony Burgess, who was not yet aware of the resonance that his work might have years after its publication. Nevertheless, his willingness to depict a violent, dystopian future for his contemporaries and to criticise it, using the method of maieutics in particular, in order to open reader's eyes to the world around them is what really feed the new reading that can be made of his novel at the posthuman turn. The fact of criticising in the course of the book or at least provoking a reflection in the reader concerning a world without diversity, without nature, in the hands of a totalitarian government putting all its confidence in a technology that can profoundly transform humans and turn them into clockwork oranges that have lost all vitality, is really a staging that can be the source of a totally new reading of *A Clockwork Orange*.

Considering all the elements highlighted above, the real particularity that can be attributed to Anthony Burgess' novel is that, beyond the novelist's initial intentions inspired by a post-war context and his life, *A Clockwork Orange* has been able to acquire a singular dimension especially at the posthuman turn. By instilling in his novel ideas, reflections and ethical debates about human nature and its modification by technology, Burgess has

unknowingly guaranteed a durability to his work that a 21st century reader can now fully appreciate.

## Conclusion

As a conclusion, this study has attempted to demonstrate that Anthony Burgess, in his novel *A Clockwork Orange*, was engaging with contemporary issues anticipating the posthuman turn. Whether he is considered a real precursor or a visionary, Anthony Burgess dealt with themes in a particular style and manner which, 60 years after the publication of his novel, can be analysed again and given a very contemporary, even posthuman dimension.

Indeed, Burgess, in a first step towards a posthuman reflection of which he himself was not aware at the time, questions human behaviour and nature, both his own and that of his reader, throughout the novel. Representing a characteristic element for many dystopias at the time of the novel's publication in 1962, this questioning, seen by experts such as Mark Greif as a commonplace among post-war authors, is here analysed as a first step towards the concept of the posthuman. In fact, in keeping with his time, Burgess wanted to open his readers' eyes to interrogations about their human nature that is to say on the traits common to all humans that orient their behaviour, feelings and thoughts towards what is considered commonly and naturally human. Throughout his book, Burgess encourages the reader, in a maieutic tendency based on awakening reflections in the interlocutor[52], to ask themselves questions, in particular "What is going to be then, eh?" (Burgess, 2013:7), about what will happen if the Ludovico technique undergone by Alex, the protagonist, is generalised? What will happen to humans if it is to be changed to be only good? Does the human being have a future if the only possible prospect is to keep improving it to make humans perfect? Burgess' readers, initially identifying with the government's decisions to transform Alex, who is perceived as a heartless criminal, soon realise that what is at stake here is their own human nature and not just the safety and criminality of a society. Hence, Alex, as several passages in the novel demonstrate and that have been analysed, embodies the allegory of a human being in danger, challenged in his deepest nature, destroying his literal and figurative home and taking the risk of signing his own demise. It is not only human nature that is questioned here but the future of humans in general. Without being in a purely posthuman tendency here, it is already possible to perceive a posthuman echo in the way Burgess guides his reader towards a questioning of their future,

[52] The maieutic trend referred to here is to be understood according to the definition, already mentioned at the beginning of this research, by Mark Greif in his book *The Age of the Crisis of Man* (2015): "The maieutic, by insistent and forceful questioning, seeks to bring into being and bring to birth in another person answers that will reward the questioner's own belief in the character of the universal capacity for thinking – and do something to the other person's character, too" (24).

their nature, their use of technology (to torture and transform humans), all that as a human being. In consequence, *A Clockwork Orange* unknowingly brings the reader face to face with what will be the basis of posthumanism decades later that is to say the prospect of using technology to improve human beings to the point of changing their nature and making them lose what makes them human, such as their free will.

If in a first step Burgess only offers the basis for what could become a posthuman reflection on human nature, its modification and future, it is a real posthuman turn that the reader takes when human artificiality, when human nature is being modified, is discussed in the book. Indeed, through an alienated Alex seeking to feel alive and turning to violence, his instincts, natural drives are questioned by the government wanting to annihilate them. Combining technology and drugs to modify the natural chemical reactions of Alex through Ludovico's technique (an aversive therapy), the government goes against the nature in humans. By imposing a type of behaviour and choosing which of the natural chemical reactions of the human body to keep and which to annihilate, it is Alex's human nature as a whole that is changed, turning him into an artificial being, a clockwork orange that has lost the possibility of choosing between doing good or not (the novel's title here gains a particular resonance by summarising this state of organic being made mechanical from the beginning of the novel). The loss of his free will and the imposition of certain induced behaviours transforms Alex into a being on whom goodness has been imposed by means of artifice, violence and automatism. To what extent is Alex still human? This is the question readers ask themselves as they witness this transformation. Alex becomes an actual symbol: that of an anthropocentric society in which everything is reduced to a problem that can be solved with the help of technology and in which the human being is treated as a being that must be perfected. As a result, violence is perceived as a disease that must be fought, even though it is a natural aspect of the human being who remains above all an animal. It is a real posthuman reflection that emerges through this emphasis on the artificiality of the human being seeking to modify and perfect itself. Acquiring through this artificiality a status that can be called transhuman[53], human artificiality is therefore what can be called a posthuman element in *A Clockwork Orange*.

Although human artificiality can already be seen as a posthuman element, it is particularly through the ethical treatment made of it by the author that it acquires a very specific

[53] The concept has to be understood here, as already defined in this research, as a human being who, here through a manipulation of his chemical composition, is in transition (hybrid) towards a being, human or not, surpassing all natural human limits. The being resulting from this transition can then already be called posthuman.

scope. Indeed, it has been argued in this research that Anthony Burgess was an author who was as much influenced by his personal life as by the sociological context in which he wrote and by the mainly dystopian literary landscape of his time. Nevertheless, one of the characteristics distinguishing Burgess from other authors such as Orwell and Huxley in this post-war sociological and literary landscape is the ethical considerations he instilled in *A Clockwork Orange*. In fact, by having his protagonist, Alex, fail his suicide attempt caused by his transformation due to Ludovico's technique, Burgess places a particular emphasis on a post-artificialisation context of the human being. Alex, having become a martyr through his suicide attempt and thus being cured of his transformation, recovers his violent impulses and becomes a 'normal' human being again. It is through this step backwards, which is imposed on the government by the media and the people, that the reader can see the lack of ethical considerations that the government has displayed in its only desire to reduce crime in order to get re-elected. In the face of this attitude, protests and ethical awareness emerge among the people and the reader of the novel. From the government's extreme enthusiasm engendered by the possibility of technologically modifying the human brain and preventing it from being violent, the readers move to a distrust generated by the use of this technology through torture. From a reflection that is then linked to a technological posthumanism based on an absolute reliance on technology and the perspectives it offers to human beings, the reader is then confronted with a more ethical vision taking into account the impacts that the use of this technology can have on humans but also on its human nature and its environment. Hence, this reflection echoes not a technological posthumanism but rather a so-called biological or critical posthumanism that does not rely solely on the use of technology with almost blind trust but rather on its proper use.

This new vision analysing in a posthuman (biological) perspective is particularly present in the last chapter of the novel. In fact, it is possible to observe in this last chapter many echoes of some of the most recent posthuman theories such as Rosi Braidotti's "zoe-centric world" (2018:43). These kinds of theories are indeed looking through posthumanism not for an opportunity to highlight the prowess of technology or the production of a perfect being without any natural limits called posthuman, but rather for an opportunity to redefine the human being in its relationship to its own nature and environment. In other words, the posthuman discourse becomes a discourse proposing a broader ecology of life for all (humans and non-humans). This vision can already be perceived throughout the novel in the way Alex's society is depicted as an urban, violent London deprived of all diversity. Through the absence or treatment of what

Braidotti calls "missing people" (2016:29), in other words all those people, and things, that are marginalised today such as racial, sexual, social minorities, women, animals, nature, etc., combined with the negative depiction that is linked to this kind of society, it is the critique of an anthropocentric, materialistic world based on human exceptionalism that Burgess offers to his reader (again without being fully aware of it). With this in mind, and adding to it the attempts that are made through Alex to suppress any natural aspects or impulses in individuals, the final chapter takes on a special significance and is here read as a moment of revelation for Alex. Indeed, Alex, once again an individual capable of choosing between violence and goodness, decides, on his own, to abandon violence and to put his energy into other projects such as starting a family. By abandoning his (natural) violent impulses that allowed him to feel alive in a world he no longer identified with, Alex shows that he has understood that there are other ways to feel alive. These ways, related to reproduction and the acceptance of the natural process of ageing, are associated with a reconnection to his human nature which is, in part, animal. It is then a kind of reconnection to nature and to human nature that is proposed here through the acceptance of natural processes affecting all human beings but also animals and non-human beings (such as plants). This, analysed within the framework of a biological posthumanism here, can be fully perceived as a posthuman reflection on the future of the human species.

Burgess was thus an author ahead of his time through an unprecedented ethical awareness in his novel, *A Clockwork Orange*. However, it should not be forgotten that Anthony Burgess was unaware of the concepts of posthumanism, transhumanism, the posthuman and others: his intention in writing his book was therefore not consciously posthuman even though, as this research has argued, it displayed elements that can be analysed as such nowadays. Compared to novels such as Huxley's *Brave New World* and Orwell's *1984*, which function primarily as warnings against political, technological or other abuses, Burgess and his novel are clearly visionary. He can then be seen as part of a first step, perhaps a first generation of authors, towards literary fiction works engaging more explicitly with posthuman issues. Indeed, more and more contemporary authors are attempting fictional approaches that blend ethics and the posthuman, as Burgess unknowingly did, but in a much more conscious way. To give just one of the best-known examples, Margaret Atwood, previously mentioned in this research for her concept of ustopia, in her *Oryx and Crake* trilogy[54], presents her readers with a real post-human world that combines the decimation of the human race with the creation of a new people of

[54]The trilogy consists of the following novels: *Oryx and Crake* (2003), *The year of the flood* (2009) and *Maddaddam* (2013).

creatures, the Crakers, who are non-violent and more sustainable in their way of being (e.g. they follow a vegetarian-type diet). This way of ethically and consciously reflect on the posthuman is not an isolated case among the literary landscape of the 21st century in particular. It can even be argued that this reflection is taken to an extreme that Burgess' novel does not reach. *A Clockwork Orange* is not about the total disappearance of the human being or even the creation of a real posthuman, a creature beyond the natural limits of humans, but rather about a transitional phase where the human being begins to be modified (for example in the chemical reactions of his body). What status, then, can Burgess' novel acquire in comparison to more recent posthuman novels? How far do these novels dealing with posthuman conceptions go in their ethical treatment of them? And above all, how far can the ethical perspectives raised by the idea of the arrival of a posthuman creature on earth go? All these questions demonstrate at least one thing: posthumanism still has a bright future ahead of it... and perhaps not only in fiction!

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